

Welcome to 1984 !! Let's hope this new year brings peace throughout the world before this year comes to an end. Onward....

THANKS WLS and KBYE for the GREAT monday morning (the 19th). Thanks to WLS for the two minute salute to the NRC, it was greatly appreciated. And thanks to Resnick for arranging the entire morning. Hope he didn't freeze out there while working on the equipment, hi. And thanks to the members who called KBYE and showed your support for the test and the NRC! Thanks.

58th Anniversary Shirts Word from J. Starr is that all those that ordered shirts should have theirs by the 15th. If not let us know and we shall see what happened to them. For those that have waited patiently ... thanks.

From the Opps! Department: We listed a few issues back the address for RADIOPHILES, with the wrong Post Office Box. The correct address is: P.O.Box 548381, Houston, TX 77254. Sorry.

DUSTY DIALS, another new column makes its debut. Authored by Tom Farmerie, it shall run semi-regular and contain tidbits, stories, etc on radio subjects that took place back in the early radio days. Hope you enjoy it. You'll find it on page 33.

ADDITIONS/CORRECTIONS to the 50th Anniversary Book can be found on page 33.

Ron Schatz comes word that WKZY 778 18kw D/1kw is on the air, as of Dec 17. Their address: 3448 Marinatown Lane NW , N. Fort Myers, FL 33983

FOR SALE: Hammarlund HO-160, little used. Asking \$250 Write to: Arlo Pelley, 1998 Bth Ave., Marion, 1A 52382, Or call (NO COLLECTS): 319-377-7119.

REMINDER: For those ... you that write overseas, we remind you that all the clubs within ANARC, ... which we are part, have agreed to protest those countries that continue to practice intentional jamming. We ask that you either not write to those countries anymore, or if you do, please send along with your correspondance a protest to their continued practice of intentional jamming. Thank you.

Below you shall find the remaining Publishing Schedule for Volume 51, I had ment to have ran it a few issues back but I forgot. Sorry. I hope everyone knew that they were not suppose to get an issue last week.

Bublishing Cabadula for Haluna St.

	00115	ming achievante a	Or Aniquie 27:			
3	ISSUE	MASTHEAD DATE	PUB SESSION DATE	1SSUE	MASTHEAD DATE	PUB DATE
	13	JANUARY 9	JANUARY I	22	MARCH 12	MARCH 4
	14	JANUARY 16	JANUARY 8	23	MARCH 19	MARCH 11
	15	JANUARY 23	JANUARY 15	24	APRIL 2	MARCH 25
	16	JANUARY 38	JANUARY 22	25	APRIL 16	APRIL 8
	17	FEBRUARY 6	JANUARY 29	26	MAY 7	APRIL 29
	18	FEBRUARY 13	FEBRUARY 5	27	JUNE 11	JUNE 3
	19	FEBRUARY 28	FEBRUARY 12	28	JULY 16	JULY 8
	20	FEBRUARY 27	FEBRUARY 19	29	AUGUST 28	AUGUST 12
	21	MARCH 5	FEBRUARY 26	38	SEPTEMBER 24	SEPT 16

### LOOK INSIDE

2.... AM SWITCH 15 .... PSSA: DILEMMA ? 25.... USING THE APT-2 3.... DDXD 17....FCC NEWS RELEASE 28....AM STEREO IB .... RAMBLIN' BACK 11...1DXD 33.... DUSTY DIALS 14...CONTEST 19....ASSBY OF APT-2

35.... HQ-189 ALIGNMENT 38....HUSINGS

### AM SWITCH

JERRY STARR C/O WSRD RADIO 401 N. BLAINE AVENUE YOUNGSTOWN. OHIO 44505

			LE		*	Y	OUNG	STOWN. O	_
CALL L	ETTER	APPL	ICATIONS		CALL	LETTER	GRA	NTS-	New calls
Preser	t call	:		Seeks:	01d c	all:		1000	New call:
1130		PA	Waynesboro	WEED	830	*New	HI	Marshall	WKKD
1170		NC	Claremont	WCXN	930	WEVR	IL	Aurora	WOXM
1300		NV TN	Henderson Nashville	KREL WNQM	1120	WIZY KOKI	LA	Gordon Bayou Vista	KOLP
1300	HLU1		Mashviile	mingri	1330	WSWL	FL	Milton	WAVX
APPL I	ATIONS	FO	R NEW STATIO	NS	1460	KWAZ		Lubbock	KTLK
1090		arlo	otte Amalie:						
GRANT	S FOR I	NEW	STATIONS		1				0(515)
1460	NJ M	ount	Holly: 5000	03 (replaces	the di	eleted	WJ.	indow Rock, AZ Z)	005157
APPLI	CATION	S FR	OM EXISTING	FACILITIES	I			500 01	
860	WHRT	AL	Hartselle:	frequency to to 5000/5000	730 KI	tz, poi	wer	to 500 D1	
930	KRKX	FL	Milumbie	nower to 500	00 (250	CH)			
1010	WSJP	KY	Murraux Ch	Lange day now	er to Z	500. U	A to	U4	Vo
1260	WQ1S	MS	laurel: fr	equency to by	90 KMZ.	power	to	10000 D1, move	AR
1340	WKSN	HY	Jamestown:	day power to	watts n	ight.	beco	ne U-2, move X	R
1550	WLUX	LA	paron kouge	. add 5000 1		3			
GRANT	S TO E	XIST	ING FACILITY	ES					
690	KZKZ	AZ		relocate XR					
910		KY		relocate XR	vn.				
980	WBIX	WA FL	Jacksonvil	locate night	C RETUR	NED an	olic	ation for full	time
1440			Favettevil	le: to 1040	kHz 100	00/100	0 U2	, move to rarn	nington, AK
1480	WSDS	MI	Ynsilanti:	increase da	v power	to 10	00.	add 5000 night	s. U4
1490	WACM	MA	West Spring	gfield: chan	ges fro	m DA t	o no	n-DA day power	
	KXES			relocate XR					
COMHE	NTS, C	ORRE	CTIONS, FILE	ER, BROADCAS	TING HA	GAZINE	MIS	TAKES, ETC	
540	*New	CA	Hesperia:	is D3, not D	1 as pr	evious	1y 1	isted	
1020	WJEP	CO GA	Port Collin	despite ou	grant	entrie	ed a	move to Welli Broadcasting	concerning
1020	HULP	40	this static	on, it is in	GA, not	FL.	WIII	be Re1/Gos	concerning
1200	*New		Rancho Mira	age: change a	ntenna	mode t	O U4		
	*New	KY	Radcliffe:	is NOT on 1	220 des	pite w	hat	Broadcasting p	rinted and
1340	WKSN	NY	James town:	Interesting	bit of	histo	rv i	200 with 5000/	the above
1340	MINGH		application	for daytime	power	increa	se t	n reference to o 500 watts	.Back in
			1960 when	the Class IV	station	s were	fir	st permitted t	o raise
			daytime por	ver to 1000 w	atts, a	very	few	stations in th	e country
	were	100 107	(now WOVI )	il city PA	ne mini	mum in	terr	erence contour tions. WKRZ t	s. WASA
	initi	ativ	e and applie	ed for, and w	as gran	ted a	lice	nse to become	the first
	DIREC	TION	IAL gravevar	d channel sta	tion.	Their	simo	le 2-tower sys	tem (which
	still	ope	rates today	) pulled in t	heir 10	00 wat	t 51	gnal to the pr	evious 250
	DA to	cont	our toward	Jamestown. H	remain	BE 25	MOU!	d have to also tts and, today	are one
	of th	e ve	ery few Clas:	s IV stations	in the	count	ry t	o still operat	e with low
	power	in	the daytime.	. They now e	videntl	y feel	tha	t they can squ	eeze in an
	incre	ase	to 500 watt:	s and remain	non-DA.				
More	if it	happ	ens,						
			Stan	-					
		//	•						
Jerry	Starf	8 8	Suffalo K. Fe	oonman (our	50th	A.M.S.	)		
++FLASE	I BI	JLLE	TIN The F	CC announced	today (	12/2/8	3) 1	that Canada had the FCC to in ing PSSA lices these to be point a daytime lichance to look mess! A compi	given the
go-al	nead ar	id h	as agreed to	sign the per	all sta	tions	hole	ing PSSA 16	plement
the I	Post Su	inse	t Authority.	ations immedi	atelyl	Look	for	these to be	ises may
star	using	sta	tion operati	ng with post-	sunset	hours	with	a daytime 11	ense before
12/2	/83 has	s be	en in violat	ion of the ru	iles.	ve ha	e be	chance to loof	at the FCC
pape	rwork d	on t	he PSSA situ	ear here in t	X News.	a work	T a	messi A compi	anion piece
on th	nis sit	tuat	ion will app						

DOMESTIC DX DIGEST

DAVE SCHMIDT 42 CHELWYNNE RD. CASTLE HILLS NEW CASTLE, DE 19720 3

Here is the offical ARC column which is almost as exciting as listening to Daris Bay records! Then sending your items in, please keep them on one side of the paper, type or neatly write, AST, skip a line between items, etc. And after our break, a nice sized column to Start off the new year!

etc.		alter	our break, a nice sized column to start off the new year!
SP::0;	LALL		
570	7J 14	N3	ND PWDSTO I = 12/4 2145 w/naws in French up til s/off w/Oh Canada, evidently not AN on AA or off AN sked. (VIX-OT)
700	WCAT	MA	ORANGE - 11/29 0649 noted w/ennouncement for early s/on during bad weather conditions, 0600 s/on. (KAX-M.)
1170	MAXE	SC	LEXINGTON - 12/17 0150-0215+ ET w/Mor/CH/Instr. music, no breaks other than ID 0200. Fair/Good w/mull on TVA. (DS-DE)
	WA.43	TH	DONALSON - Add.: 1617 Lebunon Rond, Mashville 37210 por recent verie. (JA-PA)
1200	KPNY	ND	FARGO - For v/l and program schedule, add.: Box 6008, Fargo 58108, sken. 0430-2300 7 days a week, also mentioning "We welcome visitors!" w/directions "iven! (DS-DE)
1260	WORT	AL	SIRMINUALA - Add.: 244 doodwin Great Prive, drest Building, Suite G-1260, 35209 per v/l. (DS-DE) ditto, per info. (JM-PA)
1310	MASY	7A	NEWFORT NEWS - Add.: 2302 W Moreury Blvd, Hampton 23666 per v/l. (3.1-MJ)
1430	MIKH	PL	LAKALAND - 12/6 0226 very good w/PsA and foR music, ex-M.FD. (JM)
1450	VIIN	ЯJ	ATLANTIC CITY - 11/27 0615-0630 on top of free. W/gospel music CHS sports, weather, clustered ads, add.: 2707 Atlantic Avenue, 08401. (KJ-PA)
	MPAH	PA	POTTSVILLS - 11/27 0658 (Sunday AM) noted w/full data s/on, so is not on 24 hours. (KG-PA)
	VBJM	22	POCUONOCK - 12/2 0005-0030 noted on EY w/rock music, many ID's and requesting reports, (JS-OH)
1510	X007	NO	INDEPENDENCE - 12/4 1758-1800 fading up w/good signal o/WLAC w/religious program and long s/off mentioning sible Study Radio and power of 10000 watts. (JM-PA) Log lists 1000 watts.
DX TO	STS:		
1140	NLNT	Hea	rd: SP-UJ
razs.	WASG	ton	ong at times w/modern religious music, long ID's, period of e noted, slight WDSL-1150 spinsh. (DS-DS) who should street the music street of music sown become
		_	-1380 w/TT 0200-0215, voice ID at start and end. (JFH-OK)
	on	KYCA: KYGQ:	-1490 w/TT 0216-0224, voice ID. (JFH-0K) -1260 0202-0208 w/TT, phonetic ID at end. (JFH-0K) -1400 w/TT, ID's 0110-0126 tuneout. (JFH-0K)
4th M		XCUZ-	-1490 w/TT, voice ID's 0215-0230. (JFH-UK) -1340 0200-0207 poor/fair w/TT/ID. (RK-IL) KCEY
	Y - MI		
540	ADMA	MD	POCOMOKE CITY - 11/13 1634-1640 foir w/ID, ads during break
	*****		in Colta football. (3%-15)
	XXAK	UT	DELTA - 11/30 1845-1850 atop w/CW music, ID. (DKX-CA)
	XWMT	IA	FORT DODJE - 12/4 1738-1745 good/stendy signal w/s/off, first
	WARD	PA	signal holds up well, s/of: 1800. (JM-PA)
50	WKRC	Diff	CINCINNATI - 11/23 1721-1724 briefly atop w/Top 40 oldie and ID as "55 KRC". (RM-NJ)
	WSVA	VA	HARRISONBURG - 11/26 1654-1700 poor w/MoR song, anmt. of power

HARRISONBURG - 11/26 1654-1700 poor w/MoR song, anmt. of power cut them gone. (3H-MJ) Sut's like a knife! (DS)

WATERBURY - 12/3 1602-1614 fair w/UPI news, Top 40/MoR music, lost at apparent power cut. (3H-MJ) Boes that happen often?

ST LOUIS - 12/4 1740 stop freq., o/HJR w/ID, great conditions to west this evening! (JK-MD)

D FROSTBURG - 12/3 1621-1700 good way o/WFIL w/Top 56 Countdown of CM songs, local news, full data s/off w/montion of 105.3 FM. (5H-NJ) Pair in WFIL's null here days. (DS)

MEMPHIS - 12/4 1725 good w/Tolk Radio ID and phone d. (JM-PA)

D YAMKTON - 12/4 1750-1758 very nicely atop at tunc in w/old CW music, timo checks (CST) and ID's, faded down by news at top of hour, either UPI or AP. (DS-DE)

ALLEGHENY MOUNTAIN METWORK BOX 247 - TYRONE, PA. 16596



NDMV VT

WPRB MD

MABQ

56D

570

4)		
580	":D36	:1
£10	72:13 VEAF	43
620	ADNO	2C
40	YMAU	T
6.80	WOAN WPTF WONN	NO GA
690	WVOX	4
	WELD	73
730	MPIT	24
	MAK	2/
740	3245	T
800	WSV5	7/
810	GIZU	
	MPED	7/
220	สบรบ	03
820	AAAA	
860	KOSE	AF
870 880	WRTL	O:
900	SHOP CHOIL	FI
	WPLN	PA
910	WERG	TN
920	AAEW	IX
070	MMEL	PL
930	WSEV	TN
	MGHT	W
940	WOPC	MS
950	WOBE	NA
60	MSBT	I!
980	KFWJ	A2
990	CHN	Ma
1040	KP3C	27.5
50	KSTO	C
060	MMCL	I
	2002	Z.A
		ID
1080	2 x 2 T	

(3) MOJESTILL - 12/4 1718 C. music, female as, ID'o as "AM 1090 WILL XI 1980" but call sounded like W201, no W213. (J.S-JY) SuATTES - 12/6 1907-1915 femal and mynews, add 0/26725/KD0Z W/spleam from NFAA. (DXH-3') UNIDONVILLS - 12/1 1649-1658 o/KACK w/clustered acs, 3 1120 'Y 36 OH music, announcement of program tests and full data s/off, no 3.33. (KG-P.) #MS4ILETON - 12/1 1640-1645 very good w/religious program into 7232 90 full data s/off on Plassic Joseph andio. (J.-..) 57. Joseph - 11/23 2300 poor w/L thru falls. (AUS-E) 1150 THSJ N3 00.65.ALE ON EMDSON - 1273 1627 fair w/d.WA nulled w/15 and 1170 7232 J: instr. selection. (RAX-15)
MASCO - 11/11 2000 w/HB, talk pro rom, in the clear. (SA-CA)
MASCO - 12/4 1703 clear in diet null w/md, En, MYL 1190 KYSU CGCk type music. (J.-31) DEMAR - 11/26 1700 poor w/UNI. Th station w/ID, Nad news.(NX) mayd IN 1190 ANNAPOLIS - 12/1 1552-1628 in well w/s/sol music, ads, ". happy 27.7 1 Adams Enows, famin, to 2000. (J -2 ) That cat has been on there for many years! (25) MAIS M MES YOUK - 12/1 1653-1654 fading in just 0/80WO w/local ada, mention of Problyh. (J.4-2.)
MISSISS: 90A - 12/1 1639 sheaking thru 2000 w/promo for Business COM ON Opportunity saw, ID. (JA-PA) 4. FASOO - 12/4 1730-1745 w/ID, religious pro ram up til 1200 KESK KD pattern change. (#12-07).....12/4 1728-1745 w/Christmas Hymns, ID and time check into religious program, very strong w/slight inding, gone at pattern change. (DS-DS) (es. I tipped the NIZ off on this one for those who are playin, detective-hi!(DS) DAHLOHEGA - 12/3 1715-1730 in #250 partial null w/Cd music, ADOR GA s/off, "Dixie" vocal version noted, thou nt they were on til 2300. (TP-CT) That ballon broke last wook! (DS) SAGINAN - 12/1 1659 w/ID into rock music. (DS-PA)....12/4 TE XIIX 1645-1700 w/rock oldies, In, ads and very brief s/off w/hChU nulled. (WIZ-CT)
CLNTRALIA - 12/4 1728 noted w/s/off u/WCAU. (JK-42)....12/4 MIN IL 1705-1725 w/ond of Ai news, weather, Ai sports, Hod music, feden to U.HD C: music. (MIZ-CT) IECHSRIDGE - 11/7 1957 ID then faded down. (RF-XJ) 1220 GJOC AB PAIO ALTO - 11/11 1945 fair w/classical music, Ib. (Br-CA)(FOC) HIBE HAMDIN - 11/27 1630 faint but clear w/s/ori after WKEK s/ori. SOR OT SAMFORD - 12/4 1441 w/IJ noted u/MKBK. (PUC-NH) MEME UNID 12/4 1648 religious fund raiser w/montion of pledges from IN, phone a given was 883-2797. (JN-NY) SSLW maybe: (DS) AMQUI - 12/4 1650 french talk, rock music, rayming french ID "OFYM 123". (JN-NY) Is that the correct freg.; (DS) SHAWINICAN PALLS - 11/28 2225 alone w/eds, rock music, quick ID noted in passing. (J:4-21Y) LEGISBURG - 11/26 1807 fair/good in WJAR null w/TN football, ID, on way past sunset, new post sunset authority: (RE) Likely. MAITSVILLS - 12/3 1700 noted w/s/off. (JK-HD) traine we DOESERU - 11/23 2338 very weak in hash W/ID. (POC-NH) SAN DIESO - 12/6 2000 atop w/NBC news, IJ, ads, w/KJOP and 1230 CHYD 1240 KSOH CA 190 others! (DKX-CA) You have a magic counter or somethin'? STAUNTON - 12/15 2355 strangely atop w/basketball game promo, AV KOTW ID and MoR music. (DE-DS) PITT59URGH - 11/7 2007 weather, ID, rock oldios. (RP-MH) 1250 TEAS PA My closest unheard! (JM-PA) MTCX MI SAY CITY - 12/4 1700 up out of mess w/s/ofr, full data given, "Serving the Tri Cities from day City". (JS-37) SPRINGFIELD - 11/10 1857 ID then MoR record, (RP- W) 1260 XC3X BLACK HIVAN PALLS - 11/25 17442 good w/s/off, no SSB. (RK-Th) MUTCHISSON - 12/1 1846-1852 fuir w/news, ID then faded out.(JFH) WVIS KWSK KS HANOVAR - 11/22 1715-1716 fair w/PSA, weather, IJ. (SP-NJ) 1280 MEAS LY WISA GA 5AVANDAH - 11/6 1716-1731 fair w/Top 40 munic, jincle/ID.(AH) 1290 BENTON - 12/3 1742 xlnt w/Road Snow, news and weather til s/off. (JM-PA) DATTON - 11/23 2210 ID then MoR/rock oldie. (RP-M) HO OIL W. MAZZENOW - 11/6 1526-1551 briefly atop w/Top 40 oldies and ." 1300 MX PX PA W. MAZZENON - 17/0 1526-1551 Prestly drop w/log (DS)
TD as "All dit Music". (BH-WJ) Still off from, too! (DS)
201NOY - 12/3 1600 barely thru WAYZ w/ID, news. (POC-HE)
ELMPOUT NEWS - 11/6 1633-1700 very good w/Top 40 oldies, "Good
Old Rock and Holl" slogan, ID as "Newport News, Norfolk" and MUDA 1370 WEST VA gone at pattern change. (BB-NJ) WMID MI DAARBORN - 12/3 1728 good w/ID, last heard in '63 as WKHR! (JK) Radio Station







## STANSONTIGN 11/24 1005 fair w/fnanks_tvin, wish and stand. In EAP's and cyton. In EAP's distributed. W/Y: manic, cdd., nuws, weather, lout do, report, isnels from the fire quent 15's; ixf.1-200 had been .ix years beek! (20-1) and the cyton. It is stand the cy	(B)			
1930 PA 0277 NUMB - 11/24 1904 weak w/Matchi dress ID in ed. (c) 257 25347 - 11/16 1710-1711 fair w/m unit, I, ad. (s) 254 157 25 205347 - 11/16 1710-1711 fair w/m unit, I, ad. (s) 254 157 1576 1710 fair fair fair fair fair fair fair fair	_	¥.IX	FL	w/20 munic, Eds. news, weather loss to manert, ignals t
SEAT 15 SURMAN 19/4 10/4 Cold relations pro rue, bible quote, one area tongle, in an 19/4 10/4 10/4 10/4 10/4 10/4 10/4 10/4 10		100 m	Pi	2.927 DE 2 = 11/24 1904 kms s/Vitting To in sd. (SP
### AND PROPERTY OF THE PROPER	1330	LT	50	BVANGEUN - 12/4 1646 religious pro ram, bible quote, Chica
mixin, w/224% at 9/611, no ed. (Ru-Ar)  1370 NOA 12 C MARMA MLL - 11/11 1555-1613 good w/20p 40 music, Noture ID w/"Non stop" elogan. (Ai-NA)  1370 NOA 15 L MARMA MLL - 12/7 1735-1750 on top w/ads, pop music, time ID and editorial. (RG-Ar) Used to send a bag of sand before verice; Jid wonders to postal cancellin, michines 2004-2078 - 12/3 1740-1806 0% music, ID as 1570 Count Nat. (Ph. 10 15 15 15 15 15 15 15 15 15 15 15 15 15		#055	72	MARION - 12/3 1706-1715 way coall workural network proura clustered ads, weather from Wri Cities intional leather S
1370 NOA FL PERAGOLA - 12/7 1735-1750 on top Wads, pop music, time ID and editorial. (RG-JA) Deed to sens a bag of sand we their verices: Jid wonder to postal cancellin, nearbown was, ic., in unusually well, 4753 dusually top here at mit was, ic., in unusually well, 4753 dusually top here at mit PATCHORUS - 12/5 1757 in/out strong on channel w/J. music report on road conditions, new FCC hours in effect. (M-RZ) WIGO THE RANKLIN - 12/6 1757 in/out strong on channel w/J. music request for commonts well to station address, "WIT3, the AM Country" (JH-NY) WIGO THE RANKLIN - 12/7 1751 good w/local ads, weather scan repow/formade warming. (JM-NY) Wigo W/formade warming. (JM-NY) W/formade warming. (JM-NY) W/formade warming. (JM-NY) W/formade warming. (JM-NY) W/formade warming warm	1360	THOU	90	CHAPAL MILL - 11/11 1553-1613 good w/Yop 40 music, Mutual
The and editorial. (KG-A) Jose to seem a beg of sand without vortes! Jid wonders to postal cancellim, mechanic Majic", in unusually well, with annually top here at mit walls. (Frequency of the content walls with the content walls	3			ID w/"Non Stop" elogan. (3.1-10) PRUSACOLA = 12/7 1735-1750 on top W/ads, pop music, time
MALK NT PACKNOWS - 12/5 1757 in/out strong on cannol w/W must report on read conditions, new FCC hours in effect. (M. 1800) 12/4 1640 CW nuis, request for comments with to station address, "MTT3, the AM Country". (JI-NY) WIZO CH WATERY - 12/1 1720 noted w/full data ofofi. (JW-NY) PSANKLIN - 12/3 1751 good w/local ads, weather scan report without available of the world of the without available of the world of maic. (JW-NY)  1400 WILL CT WILLIMATIC - 11/29 2250 a complete shocker w/ID and whith sounded to be world of maic. (JW-18)  1410 WILL STATE - 11/24 1900 weak w/MDUT/WIOP w/SA, LD. (SP-NJ-NY)  1410 WILL STATE - 11/24 1900 weak w/MDUT/WIOP w/SA, LD. (SP-NJ-NY)  1420 WIMS IN MICHIGAR CITY - 12/4 1715 holding channel to itself, not in passing with the world of t	1370			The ani editorial. (KG-PA) Used to send a Dag of Sand Williams warries! Did wonders to postal cancelling machines!
THE PATCHS OF The PATCHS OF The PATCHS OF THE PROPERT ON TOO A COMMITTION, NOW FIGH NOUTS IN EFFECT. (M. ARICHMENDS - 12/4 1640 CM nusic, request for comments with the station address, witte, request for comments with the station address, witte, and Country". (JA-NY)  MICO OM WATER V - 12/1 1720 noted w/full data 6/off. (JA-NY)  MICO OM WATER V - 12/1 1720 noted w/full data 6/off. (JA-NY)  MICO OM WATER V - 12/2 1731 good w/local ads, weather scan rep w/tornado warning. (JA-NY)  1400 WILL CT WATER V - 12/3 1731 good w/local ads, weather scan rep w/tornado warning. (JA-NY)  1400 WILL CT WATER V - 12/2 1735 hold on the commendation of the c		MRTK	337	We down in unusually well, which usually top hore at mite.
WATE VA RICHMOND - 12/4 1640 CM music, request for comments with to station address, "MTV3, the AH COUNTY". (JM-NY)  WATE OF STANKIN - 12/3 1751 good w/full data o/off. (JM-NY)  1390 KNOB NM HEBS - 12/1 1807-1817 fair w/local news, ID then faded KORC/KNRY/XSV. (JH-OK)  1400 WILL CT WILLIMATIO - 11/29 2250 a complete shocker w/ID and whi sounded to be Yop 40 music. (RK-IL)  1410 WELM MY ELMERA - 11/24 1920 weak u/MONDY/TADF w/PSA, ID. (SP-NJ-NY)  1410 WELM MY ELMERA - 11/24 1900 weak u/MONDY/TADF w/PSA, ID. (SP-NJ-NY)  1410 WINS MY ELMERA - 11/24 1900 weak u/MONDY/TADF w/PSA, ID. (SP-NJ-NY)  1420 WINS IM MICHIGAN COLOR KRA-1400. (DKX-CA)  1420 WINS IM MICHIGAN CITY - 12/2 1715 holding channel to itself, not ID in passing. (JM-PSA)  1420 WINS IM MICHIGAN CITY - 12/2 1715 holding channel to itself, not ID in passing. (JM-PSA)  1430 MANN MJ MANNEY - 11/30 1922-1927 clear w/ads, ID, music then sur gone. (POC-NJ) sty closest unheard! (RH-NJ)  1430 MANN MJ MANNEY - 11/30 1922-1927 clear w/ads, ID, music then sur music, again 12/4 1755-1805, seems to be late w/puttorn changes. (KC-RA) and veries, too! (DS)  1440 UNID MICHIGAN CONTROL (KS-MJ)  1440 UNID MICHIGAN CONTROL (KS-MJ)  1450 MANN SC MARRES - 14/28 1913 tool (MAR, JM, ID, CA) music, days in 12/3 1747-1757 alone w/clustered acs, weather, music, again 12/4 1755-1805, seems to be late w/puttorn changes. (KC-RA) and veries, too! (DS)  1450 MANN SC MARRES - 11/31 1734-1735 good M/Ad, prone for "Swe Shop", into Jinglo/music, only my 2nd graveyarder, I dor very hard! (SP-NJ) Yee, we've noticed! (DE)  1460 CKRB PC STORED SARAGE - 11/15 1734-1735 good M/Ad, prone for "Swe Shop", into Jinglo/music, only my 2nd graveyarder, I dor we'n hard! (SP-NJ) Yee, we've noticed! (DE)  1470 KLGL LA LKAS CHARLES - 11/15 1734-1735 good M/Ad, prone for "Swe Shop", into Jinglo/music, only my 2nd graveyarder, I dor we'n hard! (SP-NJ) Husic, CM-NJ)  1480 WANN NG CHARLES - 11/15 1734-1735 good M/Ad, prone for "Swe Shop", into Jinglo/music, only my 2nd graveyarder, I dor who'l shop my 2nd gra		MALK	HY	report on road conditions, new FCC hours in effect, (HJH
MIJO OH MAVERU - 12/1 1720 noted w/full data c/oli. (JAPA)  MIJO TH FRANKIN - 12/3 1751 good w/local ada, weather scan representation. (JAPA)  MIJO TH HEBS - 12/1 1807-1817 fair w/local news, ID then faded KCRC/KNRY/KSV. (JPH-OK)  MIJO WILL CT WILLIMS ATTO - 11/29 2250 a complete shocker w/ID and who sounded to be Top 40 music. (RK-IL)  LEMMAN - 11/24 1900 usak u/WDDV/MOF w/FAA, ID. (SF-MJ)  KKID WILLIMS TI 1/24 1900 usak u/WDDV/MOF w/FAA, ID. (SF-MJ)  KKID WILLIMS TI 1/24 1900 usak u/WDDV/MOF w/FAA, ID. (SF-MJ)  KKID WILLIMS TO 11/24 1900 usak u/WDDV/MOF w/FAA, ID. (SF-MJ)  MIJO WILL WILLIAM CITY - 12/8 1746 fair/good w/GA music, FSA, ado s  "Goontry 410° slegan, o/KECD. (JFH-OK)  MIJO WILL WILLIAM CITY - 12/8 1746 fair/good w/GA music then sur  GOONE. (POC-MJ) Sty closest unheard! (BZ-MJ)  WMW. FL RAMAMA CITY - 11/24 1849-1851 good w/das, JM. ID, CM mus  MUDEN NO NONEC - 12/5 1747-1757 alone w/clustered ads, weather,  music, again 12/4 1755-1805, seems to be late w/puttorn  changen. (KG-FA) and veries, too! (DS)  1440 UNID 11/21 2008 weak u/WRAG w/time check, call sounded like:  WHO'S this! (SF-MJ) Yee, we've noticed! (DE)  1450 WAYS SC TARGES DE SEAUCE - 12/4 1943 very good w/fast talkir  Pronch formale DJ, english rock music. (JH-PA)  1460 WAME NO CHARLES - 11/28 2023 surprised to hear this u/Gaby.  MIJO KAME NO CHARLES - 11/28 2023 surprised to hear this u/Gaby.  MIJO KAME NO CHARLES - 11/28 2023 surprised to hear this u/Gaby.  MIJO KAME NO CHARLES - 12/4 1930 clear w/religious program o/WTOP. (SA  MIJO WAME NO CHARLES - 12/4 1930 clear w/religious program o/WTOP. (SA  MIJO WAME NO CHARLES - 12/4 1930 way o/MBC w/ads, news, weather,  roport, NoR music. (JM-PA)  MIJO WAMI IL MACONES - 12/4 1930 way o/MBC w/ads, news, weather,  roport, NoR music. (JM-PA)  MIJO WAMI IL MACONES - 12/4 1930 way o/MBC w/ads, news, weather,  Program til s/off, fude. (JM-PA)  MIJO WAMI IL MACONES - 12/4 1930 way o/MBC w/ads, news, weather,  Program til s/off, fude. (JM-PA)  MACONES - 12/4 1930 way o/MBC w/renen ad for cigare  and	1380	WIVE	ΛV	RICHMOND - 12/4 1640 CW music, request for comments written station address, "WTVR, the AM Country". (JN-NY)
William   Will				WAY 7077 - 12/1 1720 moted w/full data 5/011. [J/FFn/
WILLIMATIC - 11/29 2250 a complete shocker w/ID and whe sounded to be Yop 40 music. (RK-IL)  WILLIMATIC - 11/29 2250 a complete shocker w/ID and whe sounded to be Yop 40 music. (RK-IL)  EVER WY BLIMATIC - 11/29 2250 a complete shocker w/ID and whe sounded to be Yop 40 music. (RK-IL)  EVER WY BLIMATIC - 11/24 1900 weak w/DDV/YOP w/F6A, ID. (SF-M)  WY BLIMATA - 11/24 1900 weak w/DDV/YOP w/F6A, ID. (SF-M)  WILLIMATIC - 11/24 1900 weak w/DDV/YOP w/F6A, ID. (SF-M)  WILLIMATIC - 11/24 1914 1915 cond w/GE music, F6A, add of the text of	4700	2.54.5		w/tarmada warmin: (JM-NY)
Selim in Similar - 11/24 1900 weak w/mov/YPOP w/FSA, ID. (SP-NJ)  EMMIRA - 11/24 1900 weak w/mov/YPOP w/FSA, ID. (SP-NJ)  EMMIRA - 11/24 1900 weak w/mov/YPOP w/FSA, ID. (SP-NJ)  N. LAS YSSAS - 12/7 1937 atop w/local traffic conditions  splash from local KR3-1400. (DK-CA)  ELAYSNYORTH - 12/8 1746 fair/good w/GS music, FSA, add of  "Country 1410" slogan, o/KTGS. (JFM-CX)  1420 WIMS IM MICHIGAN CITY - 12/2 1715 holding channel to itself, not  ID in passing. (LUM-FA)  WWW. FL PRHAMA CITY - 11/24 1849-1851 good w/ada, 3M. ID, CM mus  WWW. FL PRHAMA CITY - 11/24 1849-1851 good w/ada, 3M. ID, CM mus  WWW. FL PRHAMA CITY - 11/24 1849-1851 good w/ada, 3M. ID, CM mus  WONNOC - 12/3 1747-1757 alone w/clustered ads. weather,  music, again 12/4 1755-1803, seems to be late w/pattern  music, again 12/4 1755-1803, seems to be late w/pattern  changes (KG-FA) and veries, too! (DS)  11/21 2208 weak w/WRRO w/time check, call sounded like it  who's this! (SP-NJ)  1460 CKRE P. ST GIORGES DE BEAUCE - 12/4 1943 very good w/fast talkin  Fronch female DJ, english rock music. (Ji-FA)  1470 KLCL LA LAKE CHARLES - 11/28 2025 surprised to hear this u/CHOW,  W/D, NSAN was no place to be heart! (JM-DJ) Lucky  1480 WAME C CHARLES - 11/28 2025 surprised to hear this u/CHOW,  W/D, NSAN was no place to be heart! (JM-DJ) Lucky  WISL PA SHANDKIM - 12/1 1755+ xlat o/WHBC w/ads, news, weather,  roport, MGR music. (JM-PA)  WISL PA SHANDKIM - 12/4 1755+ xlat o/WHBC w/ads, news, weather,  roport, MGR music. (JM-PA)  SHANDKIM - 12/4 1750 clear w/spanish program thru nulled WTC  No fulltimers in vA here, Key Hest has nover been roport  this column. (DS)  WAAI IL MACONS - 12/4 1930 way o/MLC w/Frenon ad for cigare  and jingle/ID. (JM-PA) The unmarked variety! (DL)  WAAI IL MACONS - 12/4 1930 way o/MLC w/Frenon ad for cigare  and jingle/ID. (JM-PA) The unmarked variety! (DL)  WAAR MG WARRENTON - 12/4 1700 briofly atop w/s/off w/womer info.  WARR MG WARRENTON - 11/2 1634 1617 November w/solf, MONTON W/SPAND NOVEMBER M/S SOLF NOVEMBER M/S SOLF NOVEMBER				KCRC/KMRY/XXV. (JPH-DK)
***XOLO KS LEAVEN/ORTH - 12/8 1746 fair/good w/Os music, FSA, add a "Country 1410" slogan, o/KTCS. (JFM-OK)  1420 MIMS IN MICHIGAN CITY - 12/4 1715 holding channel to itself, not ID in passing. (LUM-PA)  1430 MIMS NO MIMS AND MICHIGAN CITY - 12/4 1715 holding channel to itself, not ID in passing. (LUM-PA)  1440 MIMS NO MIMS CITY - 11/20 1922-1927 clear w/ads, ID, music then sud gone. (POO-NJ) Hy closest unheard! (BA-HJ)  1450 MIMS MONROF - 12/3 1747-1757 alone wclustered ads, weather, music, again 12/4 1755-1803, seems to be late w/pattern changes. (KG-PA) And veries, too! (DS)  1440 UNID 11/21 2208 weak u/WRRO w/time check, call sounded like in who's this! (SP-NJ)  1450 MIMS SC MIMSIE SAAGE - 11/15 1734-1735 good w/ad, promo for "Swe Shop", into Singlo/music, only my 2nd graveyardor, I dor very hard! (SP-NJ) Yes, we've noticed! (DE)  1460 CKRB PC ST GEORGES DE BEAUCE - 12/4 1943 very good w/fast talking Fronch female DJ, english rock music. (JH-PA)  1460 MAME NC CHARLES - 11/28 2023 surprised to hear this u/GHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky  1470 WECL LA LAKE CHARLES - 11/28 2023 surprised to hear this u/GHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky  1480 MAME NC CHARLES - 11/28 2023 surprised to hear this u/GHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky  1480 MAME NC CHARLES - 11/28 2023 surprised to hear this u/GHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky  1480 MAME NC CHARLES - 11/28 2023 surprised to hear this u/GHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky  1500 WEFF CT MIESORD - 12/4 1755 clear w/religious program of/NTOP. (JM-PA)  1500 WEFF CT MIESORD - 12/4 1755 clear w/religious program of/NTOP. (JM-PA)  1510 WKAI IL MACOME - 12/4 1740 - 1745 fair, even w/NEAC w/rescher can jingle/ID. (JM-PA)  1520 NGNB FL MINIAN ROOKS JEACH - 11/18 1743-1744 fair w/religious man mention of "Beach" in ID, did say 152 on AB Zand and inteners to tune in 102 FM, I didn't! (SP-NJ) 810! (MM-PA)  1520 MAME NC MARRENTON - 12/4 1700 briofly	1400	WILI		counded to be ton 40 migse (iik-IL)
NOIS ES LEAVEN/ORTH - 12/8 1746 fair/good w/GS music, FSA, add a "Country 1410" slogan, o/MNCS. (JFM-GA)"  1420 NIMS IN MICHIGAN CITY - 12/4 1715 holding channel to itself, not ID in passing. (JJM-ZA)  1430 NNJR NJ NEWERR - 11/30 1922-1927 clear w/ads, ID, music then such gone. (POC-NJ) by closest unneard! (BZ-NJ)  WMMN. FL PARAMA CITY - 11/24 1849-1851 good w/ads, 3M. ID, CA music, again 12/4 1755-1803, seems to be late w/pattern changes. (KG-PA) had verics, too! (BS)  1440 UNID 11/21 2208 week u/WRRO w/time check, call sounded like the who's this! (SP-NJ)  1450 MMMS SC NYRYLE BEACH - 11/15 1734-1735 good w/ad, prono for "Swe Shop", into Jinglo/music, only my 2nd graveyarder, I dowery hard! (SP-NJ) Yes, we've noticed! (DE)  1460 CKRE PC ST GEORGES DE BEARDCE - 12/4 1943 very good w/fast talkin Fronch female DJ, english rock music. (JH-PA)  1470 KLCL LA LAXE CHARLES - 11/28 2023 surprised to hear this u/GHOW. W/ID, NSAN was no place to be heard! (JK-MD) Lucky  1480 MAME NC CHARLES - 12/4, 12/3 1800-2000 At times, strong o/lost w/Christian programs, music, AP and local news, talk she ID as "Sumlife Radio". (JM-PA)  WISL PA SHANOKIN - 12/1 1755+ klnt o/WHEC w/ads, news, weather, report, MoR music. (JM-PA)  1500 WFIF CT MIEPORD - 12/4 1500 clear w/religious program o/WTOP. (JV-PA)  1510 WKAI IL MACOME - 12/4 1500 clear w/religious program o/WTOP. (JV-PA)  SHANOKIN - 12/1 1755+ klnt o/WHEC w/ads, news, weather, report, MoR music on "Station, did a GA or FL station go Spanish here? (KW No full times in vA here, Key Mest has mover been report this column. (DS)  1510 WKAI IL MACOME - 12/4 1740-1745 fair, even w/WLAC w/possible rel program til s/off, fude. (JM-PA)  1520 WAN IS MARROON - 12/4 1740 briefly atop w/s/off womer info. WARROON - 12/4 1740 briefly atop w/s/off womer info. MARRON - 12/4 1740 briefly atop w/s/off womer info. MARRON - 12/4 1740 briefly atop w/s/off womer info. MARRON - 12/4 1740 briefly atop w/s/off womer info. MARRON - 12/4 1740 briefly atop w/s/off womer info. MARRON - 12/4 1740 briefly atop	1410			ELMIRA - 11/24 1900 weak u/WD07/7F0F w/F5A, Lv. (SF-NJ) N. LAS VSDAS - 12/7 1937 atop w/local traffic conditions, aplan from local KRS-1400. (DKK-CA)
1420 MINS IN MICHIGAN CITY - 12/2 1773 holding channel to Itself, No. 15 1430 MAJR NJ MAMARK - 11/30 1922-1927 clear whats, LD, music them such gone. (POC-NJ) My closest unheard! (BM-HJ) WMWL PL MAMAMA CITY - 11/24 1849-1851 good whats, 3M, ID, CA mus with the such gone. (POC-NJ) My closest unheard! (BM-HJ) WMDEX NO MONROE - 12/3 1747-1757 alone whetastered ads, weather, music, again 12/4 1755-1803, seems to be late whatter changes. (KG-PA) And verics, too! (DS) 11/21 2208 weak what working check, call sounded like the short this! (SP-MJ) MAJE Shop, into Singlo/music, only my 2nd graveyarder, I done yery hard! (SP-MJ) Yes, we've noticed! (DS) 1460 CKRB PC ST GEORGES DE BEAUCE - 12/4 1945 very good what talking Fronch fomale DJ, english rock music. (JM-PA) 1470 KLCL LA LAKE CHARLES - 11/28 2025 surprised to hear this u/CHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky 1480 MAME MC CHARLOTTI - 12/1, 12/3 1800-2000 At times, strong o/lock w/Christian programs, music, AP and local news, talk shound be supplied to the strong of lock w/Christian programs, music, AP and local news, weather, report, MOR music. (JM-PA)  1500 MFIF CT MILFORD - 12/4 1530 clear w/religious program o/MTOP. (12/3 2209 soncone here w/Spanish program farm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 soncone here w/Spanish program tarm mulled MTO 11/2/3 2209 son		KCLO	KS	LEAVEN/ORTH - 12/8 1746 fair/good w/Ca music, FGA, add and
WANDER NOT SERVICE THE PROPERTY OF THE PROPERT	1420	WIMS	IH	MICHIGAN CITY - 12/4 1/15 notging changel to itself, hote
WMEX NO MONROS - 12/3 1747-1757 alone W/clustered ads, weather, music, again 12/4 1755-1803, seems to be late w/pattern changes. (KG-PA) And veries, too! (DS)  11/21 2208 week u/wR30 w/time check, call sounded like the whole this! (SP-NJ)  1450 MMYS SO MYSELE SEACH - 11/15 1734-1735 good w/ad, prono for "Swe Shop", into jinglo/music, only my 2nd graveyarder, I don very hard! (SP-NJ) Yee, we've noticed! (DE)  1460 CKRE PC ST 030RGLS DE SEAUCE - 12/4 1943 very good w/fast talkin Franch female DJ, english rock music. (MF-PA)  1470 MLCL LA LAKE CHARLES - 11/28 2023 surprised to hear this u/SHOW, w/ID, NSAN was no place to be heart! (JK-MD) Lucky  1480 WAME NO CHARLES - 11/28 2023 surprised to hear this u/SHOW, w/ID, NSAN was no place to be heart! (JK-MD) Lucky  1480 WAME NO CHARLES - 12/1, 12/3 1800-2000 At times, strong o/lock w/Christian programs, music, AP and local news, talk she ID as "Sunlife Radio". (JH-PA)  WISL PA SHAMOKIN - 12/1 1755+ xlnt o/SHSC w/ads, news, weather, report, MGR music. (JK-PA)  1500 WFIF CT WILLYONG - 12/4 1530 clear w/religious program o/STOP. (JM-PA)  1500 WIST SHAMSHOWN - 12/4 1740-1745 fair, even w/WLAC w/cossible religious in usic and "onte Navidad", sound like por 12/3 2209 soncome here w/Spanies program thru nulled MGC US station, did a Ch or FL station go Spanish here? (KA)  1510 WKAI IL MOONS - 12/4 1740-1745 fair, even w/WLAC w/possible religious in this column. (DS)  1520 WGNB FL INDIAN NOONS BEACH - 11/18 1743-1744 fair w/religious music momention of "Beach" in ID, did say 152 on AB Band and listeners to tune in 102 FM, I didn't! (SP-NJ) 8101 (DE MASC SC SPARTANDERS - 11/15 1729 good w/s/off, no wCKY. (SP-NJ) MASC SC SPARTANDERS - 11/15 1730 weak w/ID after MASC Sc/MC US CHAPEL HILL - 12/4 1638-1652 Tair w/ON music, female and "top of the country" slogan and "triangle aroa" weather.	1430	MNJR	IJ	WWARK - 11/30 1922-1927 clear w/ads. ID, music them sudd
1440 UNID  1450 MMY3 SC MARTE 32AG2 - 11/15 1734-1735 good w/ad, prono for "Swa Shop", into Singlo/music, only my 2nd graveyarder, I dor very hard! (SP-NJ) Yes, we've noticed! (DE)  1460 CKRB PC ST 03ORGES DE 3EAUCE - 12/4 1943 very good w/fast talkin Franch female DJ, english rock music. (JH-PA)  1470 MLGL LA LAKE CHARLES - 11/28 2025 surprised to hear this u/GHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky  1480 MAME NC CHARLES - 12/1, 12/3 1800-2000 At times, strong o/lock w/Christian programs, music, AP and local news, talk she ID as "Sunlife Radio". (JM-PA)  WISL PA SHAMOKIN - 12/1, 1755+ xlat o/WHBC w/ads, news, weather, report, NoR music. (JM-PA)  1500 WHIF OT MILPORD - 12/4 1530 clear w/religious program o/STOP. (I MILPORD - 12/4 1530 clear w/religious program taru nulled WTC lively Spanish music and "oste Navidad", sounds like post us station, did a GA or FL station go Spanish here? (W. No fulltimers in WA here, Key Hest has nover been report this column. (DS)  1510 WKAI IL MASOMB - 12/4 1740-1745 fair, even w/WLAC w/possible rel program til s/off, fude. (JM-PA)  1520 WGNB FL NDIAG MOOKS BEACH - 11/18 1743-1744 fair w/religious music momention of "Beach" in ID, did say 152 on AB Band and listeners to tune in 102 PM, I didn't! (SP-NJ) 810! (DS)  WARR NO MARENTON - 12/4 1700 briefly atop w/s/off w/owner info.  1530 WFMY VA JUANTIOD - 11/22 1654 fair w/ads, talk, ID. (SP-NJ)  WARR NO CHAPEL HILL - 12/4 1638-1652 fair w/OW music, female and "top of the country" blogan and "triangle area" weather.				MANAMA CITY = 11/24 1849-1851 good Wyans, 5W. 1D, Ca Must- MONROE - 12/3 1747-1757 alone W/clustered ads, weather, p music, again 12/4 1755-1803, seems to be late w/pattern
1450 MMYB SC MYRETE BEACH - 11/15 1734-1735 good w/ad, promo for "Swe Shop", into Singlo/music, only my 2nd graveyarder, I dor very hard! (SP-M) Yee, we've noticed! (DE)  1460 CKRB PC ST GEORGES DE BEAUCE - 12/4 1945 very good w/fast talkin Fronch female DJ, english rock music. (Ji-PA)  1470 MLCL LA LAKE CHARLES - 11/28 2025 surprised to hear this u/GHOW, w/ID, NSAN was no place to be heard! (JK-MD) Lucky  1480 MAME NC CHARLOTT! - 12/1, 12/3 1800-2000 At times, strong o/loss w/Christian programs, music. AP and local news, talk sho ID as "Sunlife Radio". (JM-PA)  WISL PA SHAMOKIN - 12/1 1755+ xint o/WHBC w/ads, news, weather, report, MOR music. (JW-PA)  1500 WFIF CT MILTORD - 12/4 1530 clear w/religious program o/NTOP. (JM-PA)  1510 WKAI IL MACOMB - 12/4 1530 clear w/religious program taru nulled WTC lively Spanish music and "oste Novidad", council like post us station, did a GA or FL station go Spanish here? (KY No fulltimers in VA here, Key West has nover been report this column. (DS)  1510 WKAI IL MACOMB - 12/4 1740-1745 fair, even w/NLAC w/possible rel program til s/off, fude. (JM-PA)  CJRS PQ SHERBOOK2 - 12/4 1930 way o/LAC w/French ad for cigare and jingle/ID. (JM-PA) The unmarked variety? (D.)  1520 WGNB FL INDIAN BOOKS BEACH - 11/18 1743-1744 fair w/religious music mention of "Beach" in ID, did say 152 on Am Band and histeners to tune in 102 PM, I didn't! (SP-MJ) 810! (DS WARENTON - 12/4 1700 briofly atop w/s/off w/owner info.  1530 WFW2 VA JMARTICO - 11/22 1654 fair w/ads, talk, ID. (SP-NJ) MASC SC SPARTANBURG - 11/15 1739 Weak w/ID after MASC 8/07. (SP-NJ) MASK NC CHAPEL HILL - 12/4 1638-1652 fair w/OX music, female and "top of the country" slopan and "triangle arce" weather.	1440	UNID		11/21 2208 weak u/WRAO w/time check, call sounded like ab
1460 CKRB PC ST GEORGES DE BEAUCE - 12/4 1943 very good w/fast talkir Fronch female DJ, english rock music. (JM-PA)  1470 KLGL LA LAKE CHARLES - 11/28 2023 surprised to hear this u/CHOW, w/ID, MSAN was no place to be heard! (JK-MD) Lucky  1480 WAME NC CHARLES - 12/1, 12/3 1800-2000 At times, strong o/lock w/Christian programs, music, AP and local news, talk she ID as "Sunlife Radio". (JM-PA)  WISL PA SHAMMKIN - 12/1 1755+ kint o/WHEC w/ads, news, weather, report, MSR music. (JW-PA)  1500 WFIF CT MILTORD - 12/4 1530 clear w/religious program o/NTOP. (INTERCED - 12/4 1530 clear w/WALAC w/possible religious of this column. (EX)  1510 WAMI IL MACOMS = 12/4 1530 way o/LACC w/Frence ad for cigare and jingle/ID. (JW-PA)  1520 WOND FL INDIAN BOOKS BEACH - 11/18 1743-1744 fair w/religious music momention of "Beach" in ID, did say 152 on AND Band and histeners to tune in 102 FM, I didn't! (SP-MJ) 810! (DE WARENTON - 12/4 1700 briofly atop w/s/off w/owner information of "Beach" in ID, did say 152 on AND Band and NOTE MD CHASTEROWN - 11/15 1730 weak w/ID after MASC 8/01. (SP-MJ) MASC SC SPARTANBURG - 11/15 1730 weak w/ID after MASC 8/01. (SP-MJ) MASC SC SPARTANBURG - 11/15 1730 weak w/ID after MASC 8/01. (SP-MJ) MASC MC CHAPEL HILL - 12/4 1638-1652 fair w/CW music, female and "top of the country" slopan and "triangle arce" weather.	1450	жихз	SÇ	MRPLE 35ACH - 11/15 1734-1735 good w/ad, promo for "Swap Shon", into Single/music, only my 2nd graveyarder, I don'
Fronch female DJ, english rock music. (SH-PA)  LAKS CHARLES - 11/28 2023 surprised to hear this u/CHOW,  W/ID, NSAN was no place to be heard! (JK-MD) Lucky  WISL MAME NC CHARLOTTS - 12/1, 12/3 1880-2000 At times, strong o/loss  W/Christian programs, music. AP and local news, talk sho  ID as "Sumlife Radio". (JM-PA)  WISL PA SHAMOKIM - 12/1 1755+ kint o/WHBC w/ads, news, weather,  report, MOR music. (JM-PA)  1500 WFIF CT MILTORD - 12/4 1530 clear w/religious program o/WTOP. (J  12/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  12/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  11/2/3 2209 soncone here w/Spanish program taru nulled WTO  12/3 2209 soncone here w/Spanish program o/WTOP. (J  15/2/3 2209 soncone here w/Spanish program taru nulled WTOP.  15/2/3 2209 soncone here w/Spanish program taru nulled WTOP.  15/2/3 2209 soncone here w/Spanish program taru nulled WTOP.  15/2/3 2209 soncone here w/Spanish program taru nulled WTOP.  15/2/3 2209 soncone here w/Spanish program taru nulled WTOP	1460	CKRB	P.	ST GEORGES DE BEAUCE - 12/4 1943 very good w/fast talking
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WISL PA SHAMOKIN - 12/1 1755+ xint o/WHSC w/ads, news, weather, report, MoR music. (JM-PA)  1500 WFIF CT MILTORD - 12/4 1530 clear w/religious program o/NTOS. (INTEROR) - 12/4 1530 clear w/religious program taru mulled WTC lively Spanish music and "oste Novidad", sounds like post us station, 4id a GA or FL station go Spanish here? (KY No fulltimers in VA here, Key Nest has nover been report this column. (DS)  1510 WKAI IL MACOMS - 12/4 1740-1745 fair, even w/NLAC w/possible rel program til s/off, fude. (JM-PA)  GJRS PQ SHERBOOKS - 12/4 1930 way o/HAC w/French ad for cigare and jingle/ID. (JM-PA) The unmarked variety? (D.)  1520 WGNB FL INDIAN BOOKS BEACH - 11/18 1743-1744 fair w/religious muno mention of "Beach" in ID, did say 152 on AM Band and histeners to tune in 102 PM, I didn't! (SP-MJ) 810! (DS WARR NO WARRENTON - 12/4 1700 briefly atop w/s/off w/owner info.  1530 WFW2 VA JUANTICO - 11/22 1654 fair w/ads, talk, ID. (SP-NJ) MASC SC SPARTANBURG - 11/15 1739 weak w/ID after WASC 8/Off. (SP-NJ) WRSX NO CHAPEL HILL - 12/4 1638-1652 fair w/OX music, female and "top of the country" Blogan and "triangle area" weather.				ID as "Sunlife Radio". (JM-PA)
1500 WFIF CT MIEPORD - 12/4 1530 clear w/religious program 0/NTOP. (12/3 2209 soncone here w/Spanish program taru nulled WTC lively Spanish music and "oute Navidad", counds like post US station, did a GA or FL station go Spanish here? (EA No fulltimers in GA here, Key Hest has nover been report this column. (BS)  1510 WKAI IL MACOND = 12/4 1740-1745 fair, even w/WEAC w/possible religious til s/off, fude. (JM-PA)  CJRS PQ SHARBPOOKE = 12/4 1930 way o/MEAC w/French ad for cigare and jingle/ID. (JM-PA) The unmarked variety? (DL)  1520 WGNB FL INDIAN MOCKS BEACH = 11/18 1743-1744 fair w/religious muno mention of "Beach" in ID, did say 152 on AM Band and histeners to tune in 102 PM, I didn't! (SP-MJ) 8101 (DE WARR MC MARRENTON = 12/4 1700 briefly atep w/s/off w/owner info.  1530 WFM2 VA MARRENTON = 12/4 1700 briefly atep w/s/off w/owner info.  1530 WFM2 VA SPARTANBURG = 11/15 1730 Weak w/ID after MASC 8/Off. (SP-MJ)  MACOND SPARTANBURG = 11/15 1730 Weak w/ID after MASC 8/Off. (SP-MJ)  WRBX NG CHAPEL HILL = 12/4 1638-1652 fair w/OV music, female and "top of the country" slopan and "triangle area" weather.		. Wist	PA	SHAMOKIN - 12/1 1755+ xint o/WHBC w/ads, news, weather, strength, MoR music. (JM-PA)
1510 WKAI IL MACOMS - 12/4 1740-1745 fair, even W/WEAC w/possible reliprogram til 5/0ff, fude. (JM-PA)  CJRS PQ SHRRBOOKE - 12/4 1930 way 0//EAC w/French ad for cigare and jingle/ID. (JM-PA) The unmarked variety: (DL) and jingle/ID. (JM-PA) The unmarked variety: (DL)  1520 WSNB FL INDIAN MOCKS BEACH - 11/18 1743-1744 fair w/religious my no mention of "Beach" in ID, dia say 152 on AB Band and listeners to tune in 102 PM, I didn't! (SP-NJ) 810! (DE WARR MC MARRENTON - 12/4 1700 briefly atop w/s/off w/owner info, WARR MC MARRENTON - 12/4 1700 briefly atop w/s/off w/owner info, MARC SC SPARTANBURD - 11/15 1739 good w/s/off, no wcKY, (SP-NJ) MACC SC SPARTANBURD - 11/15 1730 weak w/ID after WASC s/off. (SP-NJ) WRSX NC CHAPEL HILL - 12/2 1638-1652 fair w/JW music, female and "top of the country" blogan and "triangle area" weather.	1500		GT	MILPORD - 12/4 1530 clear w/religious program o/WIDP. (AD 12/3 2209 soncone here w/spanish program taru nulled Poss lively Spanish music and "este Navidad", soumed like poss US station, did a GA or FL station go Spanish here? (KAZ No fulltimers in GA here, key West has never been reported
CJRS PQ SHARSPORE - 12/4 1930 way of nake wyletenin to regare and jingle/ID. (JM-FA) The unmarked variety? (D.) and jingle/ID. (JM-FA) The unmarked variety? (D.) and jingle/ID. (JM-FA) The unmarked variety? (D.) INDIAN BOOKS BEACH - 11/18 1743-1744 fair w/religious on no mention of "Beach" in ID, dia say 152 on AM Band and histeners to tune in 102 FM, I didn't! (SF-MJ) 810! (DE WARRENTON - 12/4 1700 briefly atop w/s/off w/owner info.  WARR NO WARRENTON - 12/4 1700 briefly atop w/s/off w/owner info.  WARR NO SPARTANBURJ - 11/15 1739 good w/s/off, no NCKY, (SF-MJ) WARS NO CHAPEL HILL - 12/4 1638-1652 fair w/OX music, female and "top of the country" slopan and "triangle area" weather.	1510	WXAI	IL	MACOMS - 12/4 1740-1745 fair, even W/WEAC W/possible relig
1520 WGNB FL INDIAN MOCKS BEACH - 11/18 1743-1744 Fair W/religious mu no mention of "Beach" in ID, dia sy 152 on AB Band and histeners to tune in 102 FM, I didn't! (SP-NJ) 810! (DE NARR MC MARRENTON - 12/4 1700 briefly atop w/s/off w/owner info.  1530 WFNO VA PUARTICO - 11/22 1654 fair w/ads, talk, ID, (SP-NJ) MASC SC SPARTANBURG - 11/15 1739 good w/s/off, no wcky. (SP-NJ) MOTH MD CHASTERTOWN - 11/15 1730 weak w/ID after MASC s/off. (SP-NJ) WRBX NG CHAPEL HILL - 12/4 1638-1652 fair w/Oy music, female and "top of the country" slopan and "triangle area" weather.		CJRS	PQ	SHERBROOKS - 12/4 1930 Way 0/ Thic wy renth at 102 Cigaret
WARRENTON - 12/4 1700 Erielly atop whyelf whomer info.  1530 WPWC VA LWARTICO - 11/22 1654 Inir w/ada, talk, ID, (SP-NJ)  WASC SC SPARTANBURG - 11/15 1729 Lood w/s/off, no wcky. (SP-NJ)  WOTH MD CHASTERTOWN - 11/15 1730 week w/ID after WASC s/off. (SF-NJ)  WRSX NC CHAPEL HILL - 12/4 1638-1652 fair w/GV music, female and  "top of the country" slogan and "triangle area" weather.	1520	WONE	FL	TURNES TO THE 17/101 - 11/10 17/10/17/4 THIY W/YOLINIANO MUC-
1530 WPMC VA PURPTION - 11/22 1654 fair W/Ads, talk, ID. (SP-NJ) WASC SC SPARTANBURG - 11/15 1739 geod W/MOTE, no NCKY. (SP-NJ) WAST MD CAMSTIRTOWN - 11/15 1730 week W/ID after MASC M/OT. (SP WRSK NC CHAPEL HILL - 12/2 1638-1652 fair W/OY music, female and "top of the country" slopan and "triangle area" weather.		VARR	yo	WARRENTON = 12/4 1700 Cridity acop w/5/011 W/Owner info.
"top of the country" slound and "triangle area" weather.	1530	WPWO	VA	recognition - 11/22 1654 fair Wiede tolk The com
weather.		MOTR	MD	SARTANBORS - 71/15 1729 Look w/3/011, No WCKY. (SP-NJ) CHARTERTOWN - 11/15 1730 week w/15 after WASC B/OIT. (SP-NJ) CHARTE HILL - 12/4 1638-1652 fair w/CV music, female and thought of the country glound and "tripne".
	20230	000		top of the deather. ()

KWOS RADIO

217 EAST MECANITY P.O. Box 478 IEFFERSON CITY, MISSOURI 65102



KMPL AM 1520 KSTG FM 97

125 Sauth Kingstaghayr - P.O. Box 501 Station, Milliam 60801

1530 Maar 4: AUSUAN - 12/3 1732 jim\_le/ID after S3J news in WORF null, power is 500 watts post-sunset per call. (Kak-Ma)....12/10 1713-1800 atop w/no XJKY til s/off, called station and and'r seemed unimpressed on signal distance, sain tany were on now extended hours, should make As an easy log. (JK-AD)
ANDSYTEE: - 11/21 1714 weak w/s/oif. (JA-RJ)
Character - 12/3 1711 tair w/mention of Charlotte in as, 1940 3733 53 1.30 possible black gospel, ialed before s/oil. (JA-An) VIRGINIA 35454 - 12/5 1733-1800 w/rock oldies, asking for 1550 WYAR TA phone calls from long distance listeners of all things; what new found power will do! 5/off 1800. (dd. -2.) foun, one of the callers was the 500, sain they weren't suppose to be on-sit(DS) 5.MRNA - 12/4 1600 Caristnes music, Church productst promo, ID as 52's most powerful fulltime Caristian A.S. etc. (JS-SY).....11/16 1717 good w/sports, music, ID. (SP-NJ) COMAL GASELS - 11/21 1730 Lood w/dual city ID, Miami. (SP-NJ) BRIC B MARTISVILLS - 11/26 2247 0/38. w/basketeall. (JX- 10) 733 7 AllouJRR - 11/18 1725-1726 coom w/ad, ID, mention of s/off. (SP TOLEDO - 12/4 1605 in J.M. null w/Ai news, CY music. (JM-NY) 212/31.80 - 11/21 1714 weak w/ID noted. (SJ-NJ) i.0 dore MODE TH AUBURNDALS - 11/18 1729 good w/s/oir. (SP-NJ) WIW3 12 OX230.10333 - 11/18 1731 Jood w/s/or: w/invite to tune to YOX 2 T'S 101.3 P.4. (SP-NJ) I guess you tried; (DE) 10RIS - 11/16 1714 weak w/o/off. (SP-NJ) TLS7 30 WORRDW - 11/15 1731-1732 Good W/ad, s/off o/religious music. WESA GA 335.5 2213 watto, post sugget is 303 watts. (XAZ-4E)....12/5 1730 noted on new extended nours, all news. (AJH-PA) FRANKFORY - 12/16 1745 w/sports, IN dichsekool basketball. (JX) VIII HARVEY - 12/17 1848-1859 jazz music, ads, no In til s/ori Wash. w/good signal. (J.2-PA) FORT LAUDIRDAL; - 11/18 1723-1724 good w/aco, Surr 16 ID's, 1580 MSSY FL rock oldies. (SP-MJ).....12/3 1750 almost sure on late power/ pattern change, xint in CaJ null w/Surf 16 ID's, nover that stron; on nite power/pattern. (KAZ-AE) EJANSBERG - 12/13 1800 noted w/rock claims til this time. KAJA PA gums up channel nightly til s/off. (AJA-PA) Un, they were play pubble gum rock music: (DS) ICARD - 12/4 1713-1714 fair w/anc't and full data s/off, MAIA NO mentioning "Beautiful Gospel", (JM-PA)
WATSRTO N - 12/4 1715 good w/Memory Lane music, weather and IN MTTh full data s/off. (JA-NA)
WD\_M IL DUCHON - 12/17 1859 noted w/s/off. (JX-PA)
WBSA IL PITESPILED - 12/17 1900-1901 good w/s/off, ID. (JM-PA) MCHA IA CHARLES CITY - 12/16 1800 NBC news, ID, sports. (JM-FA) DAYLYPORT - 12/16 1859 noted w/s/off w/ID. (J.I-P.) SURHAY - 11/30 1854 ID, weather in jumble. (FOC-NI) AI XEXN 1590 WASY EO SEAL AKHON - 12/1 1904 ID, nows, ads, weather, heard thru WANE. (FOC-MH) WENE is on 1430, no: (DS) SWAINSBORO - 12/11 1732 fair/good w/s/of1, no 553. (WFT-DC) LAPAYETTE - 12/4 1730 in well ending Cs music them s/off. (Hand) MLYA GA LEBANON - 12/4 1731 xlnt w/full data s/off, SS9. (J4-9A) MLBN MEST ALGIS - 12/4 1716 very good w/full data s/off "The Amaz-WAWA ing AN", still no answer for 9/30 report.(J.H.-A.) Amazing! (DS)
487DERSONVILLS - 11/17 1730 good w/s/off. (SP-NJ)
HUNESVILLS - 11/17 1734-1735 weak w/music, ID giving address, AHAT NO 1600 WAUP AD into ad. (SP-HJ) ANN ARBON - 12/4 1550 Amil Christmas events, sports watch promo, Dick Clark program, in good. (JN-NY) REV YORK - 11/20 2100 solid copy o/local WAAM w/relig. (FV-MI) MICHIEL - MIDDAY: 560 WJLS WY BECKLEY - 11/14 0658 solid at times thru WHND PSA W/ads and ID, 9 miles from xmtr. (FV-MI) MIAMI - 12/13 0188-0125 fair/good w/contest promo, CW music, NH3: presumed to be u/w/talk. (TC-TN) You presume correct!

OMAHA - 12/5 3025 good w/WEST w/Accuweather, 59 Country ID(DS)

ESDAR RAPIDS - 11/29 0635 poor/fair w/2 others w/weather and 590 WOW WINT IA ID. (KAZ-ME) MOKY JACKSUNVILL: - 11/27 0614 fair/poor w/MoR music, ID. (RM-TL) 620 WIMA MILMAUKES - 11/29 0637-0641 very good w/talk show w/local teacher, feded then returned w/Milwaukee area mentions. (KAZ) WSUN PL ST. PATERSBURG - 12/15 0120 fair W/"Sun Dountry" ID, GJ. (TG)
KHBY PL BL PASO - 11/28 0520 w/CJ music, "K-HAY" ID's, KETRA was off,
some splash from KNBR. (BW-CA) My closest unheard! (DKK-CA) 690 MONTICELIO - 11/29 1130 w/CW music, ads w/mention of Canada turns out to be my UNID u/NOR most days. (KAZ-MA) 710 W02% Mf

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1440 KITA AR LITTLE ROCK - 12/11 0701 fair at s/on w/inspirational station
                   promo, PSA, faded to #JEA. (JFH-OK)
JACKHOWFILLs = 12/5 0211-0234 weird conditions brought this in
        SPO. FL
                    w/fair signal w/ID, 3/Sol music, survey promo. (JA-Pa)
                   EURSKA - 12/8 0318 w/ID atop KWJK/KYOS, K-Red Country, (DKK)
LSVITTUUN - 12/12 0320-0330 w/several ID's atop free, used
 1480 KRED CA
 1490
       daga PA
                    to be a regular, (JJ-CH)
305f0J - 11/29 0053 poor u/SLAC w/AYL, ID. (RK-IL)....12/12
 1510 MARK MA
                    0225+ w/Stardust, NYL type stuff, ID. (JS-DH)
 1520 KAPJ CA
                    JOLLISTER - 11/29 0900 s/on w/anglish ID into Spanish mixing
                    w/MACY. (BW-CA)
                   BELLEVUE - 11/28 0215-0230 w/jazz music u/KXLA
 1540 KJZZ SA
                    12/4 0130-0220 very loud TT way o/KKiL then into music, looping
       *UNID
                    south, no ID's noted. (JM-PA)
 1550 *AVAB VA
                   VIRGINIA SEACH - 12/10 0115-0140+ ST w/rock oldies, ID's
                   between selections, s/off them OC. (DS-DE)
                   HUMESVILLS - 12/5 0158 good w/rock music, MrL scores, ads,
        JAAY AL
                   weather, no evidence on day power. (JK-Ph)
                   SUDDY-DAISY - 12/12 0100+ very good w/"Music in the Hight" but fading w/no ID, recognized as they have done this before, never veried report. (JM-PA)....12/12 0140-0220+ 29 w/FM addio
       *4030 72
                   and ID's as "Choo-Choo 102", using Stardust service from
Satellite Music Network, still noted 0440. (JS-0H)....12/12
                   0143-0203 w/oldies/standards, weak/fair w/PSA's, promo's for
                   "Choo-Choo 102", mentions of Chattanooga. 32 but mothinks they
                   left their All side on. (DE-DE)
 1560 WEAD KY
                   PADUCAR - 12/12 0234 xlnt w/promo for AM Stereo radio's for
                   listening to . PAD Ad Stereo then C. music. (JM-FA)
                   AMSTERDAM - 12/10 0620 caught ID u/CKLM et al. (JK-MD)
 1570 WKOL MY
       *UNID
                   12/4 0123+ very loud TT, good w/religious music later, looping
                   south. (JM-PA)
                   12/4 0140-0201 weak w/opera like music, Christmas Chipmunks record, ID and address given w/womans voice, barely noted,
1580 *UNID
                   sounded to be WHTZ Mt. Bora. (JM-PA) Isn't WHTZ 100.3 in
                  Newark, NJ? (20)
ALBEMARLE - 12/4 0136-0217 xint at times on aT w/doR music,
      *72KY NO
                   repeated ID's, asking for calls, running 186 watt Post Sunset
Power. (JM-PA) 12/8 0010 noted on ET w/rock/album music,
                   many ID's and asking for reports and phone calls, o/u CAJ.(DE)
                   CORHAM - 12/11 0150 atop WARR/WISD w/ID, rock oldies, again
1590 WASY MS
                   12/16 0120 w/weather, promo and ID. (DS-DE)
TIS:
                   AT. DESERT ISLE - 11/30 1815-1816 fair/good during deep
1610
                   Caribean fade w/several Bar Marbor mentions. (KAZ-ME)
PIRATES:
1500
      ACTIVE RADIO, AM 200 - 12/1 1700 noted atop WTOP w/8/Sol music, loops
                   east, loud at times. (JM-PA)
1616 KPRC NY
                  NEW YORK - 12/3 0126 w/ID during talk, folk music, good
                   signal. (EPT-DO)
1620 WOTU OH
                  CLEVELAND - 12/12 0020-0112 off w/AoR music, few short ID's.
                   sounded recorded, mentioned shortwave parallel on 6640, not
                   heard, am I the only one to hear "The North Coast Rock Pirate",
                   nover heard/reported in pirate bulleting, suspect low power.
                   (JS-0H)
KHOG-1440 still here as of 12/10 0700, call to station reveals awaiting parts
WFYK-1010, address is Highway 78, 36843. (JM-PA)
BILL PRATERS KETL-920 (11/25 DDXD) is indeed KYST Pasadena, TX....call KBTL
after only 6 months....station sold to new people. (SP-NJ)
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HELP DEPT .. RETURNS:

to make changes, could still be another week to 10 days til move to 1030.

used in association w/all Beatles music format which has recently been dropped

I'm looking forward to suncet reports on the 12/4 opening to the midwest, some in this report look very good. Thanks to all for the support to the column, especially good to see reports on a regular basis from the west coast cropping up. Lot's hope the semi-good conditions continue thru 1984!



(3)		
750	*XSB	GA
770 790	KAA MPAR	VA.
620	WAIT	15
360	2535	23
880	*#035	33
2.0	2417	0.77
910	CKEY	07
930 940 950	MINZ WORL	YE AA
960 980 1060	MECH OKGA • MHFB	PA PQ MI
1080	WUFO	XY
1150	WHUE	MA
	WLDS WUNID	IL
1.90	KADS	co
1200	KFNW	ND
1210	WKNY	HI
1230	SKAC	WV
3		TN
1240	JENK ICHT	XX
1250	KWSU	WA
1260	CI:II	NB
1270	*WSPR	MA
	KBRQ .	00
1300	KROP	CA
	KFMO	CA
	KPTL	NY
1310		PA
	KZZP	AZ
	KIOT	26
	KCRE	C
	*KDIA	C.
1320		GA.
1340	KAAM	NV NV
1340	WEYS	MD
.510		
	WBBX WBBC	NH MA

SF-MJ/Steve Paradies, Billville, BJ/TRP, L SF-NJ/Steve Faracies, Nilvalle, 10/14, 1000 NIN-TYThe Vizard of Poluonock, ST/1,180, Loop 31-34/Sradford Vall, Sen Bornardine, 34/R1300, Loop RP-NJ/Ronald Fordue, Byron, TV/M, 300, Falonar Loop FOC-M/Patrick O'Donnor, Minadale, NM/DA 302, La JR-NJ/Ray Novello, Indicott, NY/Skrt, DA9 SE-NJ/Bob Harrison, Union, NJ/Superadio

Sh-May Sob Marrison, Mich, Mayaperhato

RZ-IL/Robert Kranmer, Chicago, IE/E, 140., A.1294, 81000, Loops

RG-PA/Rermit Seary, (Elmutport, PA/R-180, h390, EA, h.2

DEK-CA/Don Kaskey, San Frasicoo, CA/R-140X, SMS

FAZ-May/Reil Kazaross, Ogunquist, AL/R-180, LM's

TF-GI/Tony Pitzherbert, Fairfield, CI/ICPESS

JFH-OK/John Herman, Vinita, OK/Fhileo Portable

RED-DA/Reil Tourshand, Machington, De/ICPESS

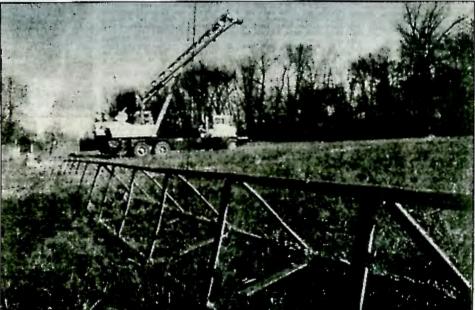
#PT-DC/Bill Townshend, Washington, DC/IOPS5/ JR-MD/Joc Kureth, Uniontown, MD/SX45, SM1, LW JS-OH/Jerry Starr, Hubbard, OH/HC180, Loop HJH-PA/Harry Hayes, Wilkes Harre, Ph/Superadio, HC180, SM2

TO-TM/Ton Connateer, Sevierville, TM/Superadio JM-PA/John Malicky, Pittsburgh, PA/Aiwa AR158 FV-MI/Prod Vobbe, Temperance, MI/ANMS, Loop DS-DE/A worn out editor://Eq180, SM2, Superadio

And as Chuck Button would may .... "New York, againt". 73's-Cogh







A crans was used to put part of ratio station WXVW-AM's transmitting tower back up yesterday in Jeffersonville, Ind.

The station resumed broadcasting more than 14 hours after vandals apparently cut cables supporting the 145-feet tower.

## Vandals topple WXVW's radio tower

The Station of the former bound between the state of the

des said the quarter-inch steel ca-bles that supported the tower op-

WA THUR ZEITZ

pear to have been cut-althoughmarkings nearby. A building body-Magnetia Ave., adjacent to the tops

Radden said police have do sispects, but detectives are continued ing to investigate.

AFC. 2, 1973

# INTERNATIONAL

CHUCK HUTTON 1035 LATHAM ROAD DECATUR. GA 30033 (404) 633-1198 BEFORE 2300 ELT

Times are GMT. For ELT subtract 5 hours. Deadlines are usually Monday.

Greetings all .... It's Tuesday night and there is a lot of stuff here to type so I'm just going to start typin. .

COSTA RICA "ICAL Certago 0219 11/17 poor with QEM de "NB" beecon, can with political talk de Guatomala FCR live W/appleuse and sung anthem -- continues past 0300. (Frodge)

MAWAII KMVI Wmiluku 11/2) 1036-1011 loud and clear with ID, oldles 55 )

music; local temp 72. (Woods)
VENEZUELA YVKJ LV de la Fe, Maracaibo 00k5 11/17 pour w/beisbol o/u TTCM. (Frodge)

530 CUPA CHEA Campbusy men with beisbol // 620 u/CFCO 0258 11/30. (Prodge)

650 ALASKA ... YAK Anchorage 11/25 1456 to 1508 fair to poor with ID,

caw, local news, sports, weather, fadocut st 1508. (Woods) MAWAIT KORL Mendulu 11/29 0951 fair along with WSM, 1D, MYL. 650

PORTLOA. Lisbon 0736 11/2 lilty PP tunes, PP telk, fair. (Hakiel) SPAIN Sevilla 2141 11/1 SS talk, pop mx, fair. (Hakiel) 666

730 TRIBIDAD AND TOBAGO Fort of Spain 0011 11/22 EE announcer w/accent giving political apoech. Good. (Hakiel)

135 EGUADOR Quito HCGB1 0236 11/20 nice soft LA vocals by woman, good. (Hokiel)

730 SPAIN Bercelone 2156 11/1 SS tolk, pop mx, feir/ (Hakiel) 747

HOLLAND Flevoland 2240 11/9 Long DD talk by man-poor/fair. (Hakiel) PORTUGAL Liabon 2111 11/1 man in PP w/talk, good-fair. (Hakiel) 756

SENEGAL Daker 0020 11/6 AA mx, telk. (Hekiel) MOROCCO 0032 11/6 AA chente o/Spain, fair. (Hekiel)

PORTUUAL Porto/Hiromor 2207 10/27 PP talk, pop mx, good. (Hakiel)

SPAIN Seville 2220 11/1-SS telk poor-fair. (Hakiel) VENEZUELA Maracaibo YVTB 11/13 LA love songs, Radio Exitos ID,

COLOMBIA BJCY Bogots 0221 11/30 feir with "cedens Sutatenza mes grande potencia" and "La emisore Sutatenze" ID's and LA vocel mx. [Frodge] 0050 11/17 fair with "Cadens Sutatenza informativa" w/

faniare and anthom o/WGY. (Frodge) ST. KITTS Basseterre 11/24 0325 caw hymn songs. (Purdue)

LIBYA Sebha Chi2 11/3 AA talk by man, poor. (Hakiel)
DUNINICAN REPUBLIC HIJB 0033 11/17 foir, man with ID "LV de ???",

sports, numero uno promo, ada t/WCCO. (Frodge) BELIZE R. Belizo 0024 11/17 feir with man with aports to 0026, 531c prayer and tunes at 0030, man began "The world at 7" and brC news at 0030. (Frodge) 11/11 at 0128 SS talk or news noted again 11/24

at 0320 playing ckw mx. (Purdue) 0:15 HAITI Cap Heitien 2248 11/1 FF Creols talk, fair. (Hakiel)

PERU Lima OAXHA 1025 11/6 alow tempo LA mx, 35 talk, poor. (Hakiel) SPAIN Murcis 0246 11/3 orchestral mx, SS talk, good. (Hakiel)

PANAHA Chitre HOL55 1000 11/22 sign on w/NA, H. Refirm ID. (Hekiel)

ARGENTINA Buenos Airos LRA1 0231 11/1 man in operatic aria, 3

pips at 0230, fair-good. (Hekiel) ALGERIA Algiero 0226 11/3 AA mx, vocals, xlnt. (Hekiel)

895 COLOMBIA HJPM Santa Harta"R. Galeon 1s emisors" 0319 11/30 poor w/mostly LA vocals, long promos, QRM de XEM-900. (Prodge) SURLINAM Nieuw Nickerie 0022 11/15 exitic Hindi vocal by man, good.

914 (Hakiel) ECUADOR Machala HCRO3 0256 11/19 LA mx, 35 tolk, good. (Hakiel)

944 HUNDURAS Tegucigalps 0254 11/19 femiliar pop tunes, 33 talk, good. (Hakiel)

945 FRANCE Toulouse 0534 11/3 FF telk by men and wemen, fair-good. [Hakiel]

ECUADOH Santo Desengo de los Colorades HCOT1 0245 11/19 LA disco 955

mx, SS talk, poor-feir. (Mekiel) COLLMBIA HJAW Cartagens man with game BC-Pelots involving Cartagens 1000 to 0534 ads/LA vocals-u/WCFL 0510 11/30 poor. (Fredge)

1040 COLCMBIA Estranguilla 0238 12/1 good, man "Ceracol Berranguilla" game BC w/follow-up tx ad for Leo Heaters-QRM de HION 0238 12/1 good, (Frodge)

101:0 DOMINICAN REPUBLIC HION Santo Domingo 0238 12/1 fair man w/MoR





(1040, continued) SS vocals-occasional sound like PP-Pac Man sound effects-QRK de HJAI. (Frodge)

MOROCCO Sense Aloun 0052 11/7 long tirede by men, AA fair-good. 1044 (Hakiel)

MEXICO XEEP 0227 12/1 very good with woman in SS with "R-E" ID's, 1060 Indian drum chants. (Frodge)

PORTUGAL Norte-Azurers 0046 11/7 old US pop times, good. (Hakiel) 1062 COLOMBIA Barranquilla MJAC 11/21 LA pop mx, "Emisoro Rio Mar" ID, 1130

WHEW nulled, fsir. (Hekiel) PRANCE Bordeaux 2028 11/7 PF talk, 15 hours before sunset, fair. (Hakiel) What do you want us to do-move sunset up carlier in the

ALEANIA Lushnje 0322 11/5 woman in Albenian talk, near castern 1215

mx, good. (Hakiel) BRAZIL Rio de Jameiro 2212 11/18 man and woman in PP talk // 6035. 1220

Good, (Hakiel) VEREZUELA Turmero YVWF 2302 11/18 LA mx, R. Apolo ID, good. (Hakiel) ST. PIERRE ET MIQUELON 1949 11/23 FF talk-note time-2:49 FM local

1375 time and 2 hours before local sunset, fair. ( dekiel)

ALBANIA Lushnjo 2336 10/31 3S tolk, classical mx, good. (Hekiel) GUINEA Conskry 2033 11/9 AA mx at this early time, fair. (Hakiel)

ALBANIA Durres 2318 10/31 Albanian talk by man and woman, fair. 1458

(Hokiel) MONACO Monte Carlo 2323 11/7 religious program w/EE preacher, 1467

good. (Hakiel) UNID LA w/lively mx noted besting up WTOP early eves in au cx, ID as Radio ??? and "Onds Husical" 2400 11/18. Noted a few other dates/times. Connelly tells me that he heard a Cuban here from Oriente province lest weekend on Uspe Cod w/lively mx here. Is

this them? (Kez) VENEZUELA La Quepa YVIC w/other LA's u/WKBW w/YV MA at 0307 s/off 1520 11/19. (Kez)

BAHAMAS Nesseu ZNS1 noted u/WPTR w/"of the Sehemes" mention 0014 1540

11/19. (Kaz) COLOMBIA R. Exites RGN 9/unid SS ofter CBE s/off 0630 11/28. 1550

(Renfrew) GABON Libreville commonly at least a carrier early even 2350 11/16 1554 putting a victous hot on Caymen 1555. Fair-good sudio w/druns and African chants. (Kez) Has been showing up often at or before sun-

set; poor and just audible 2056 11/27. (Ksz) AZCRES Samta Marta storting to fade in w/readable audio at 2045 11/27 and very good to xlnt peak with PP mann then PP mx at 2054. (KBE) 2319 10774 woman in PP, talk, rock mx poor-fair. (Hakiel) Almost a nightly pest here-rock mx and talk ID which onded in "do Atlantico" very good for mx and only fair for taped ID on fade.

UNIDS 2353 11/6 two stms here in bad QRM/QRM slop 2353 and Berlier. One seemed 3S and the other FF and might be Gabon as 1554 was decent. Ivery Coast is another possibility but 1493 was only the

wonkest bit of a carrier. (Kaz) ANGUILLA Caribbean Beacon 11/30 0330 country flavored religious and gospel mx, ID, into "The Radio Bible Holm", Recheck at 0420: ad for an island firm, ID included "The Good News Station for the Eastern Caribbean Nations". Good modulation. (Swearingen)

GUATEMALA RAB bescon; old friend week (your friends sure ere boring....CH), fading, in at 0316 11/30. (Swearingen)

And now, this issue's section of the Brien Vermin report.....

FRANCE Allouis 11/23 Outs man w/FF singing. ilest

UNID 11/23 Ch20 male w/unid talk, probably Petropavlovak but very 182

ICELAND Votasendi 11/21 0750 femsle enner, no MW // Found, noted 209 0522 W/EE rr mx.

POLAND Konstentynow 11/23 0121 male with talk vis phone. USSH Arkhangelsk etc. 11/23 Oldhi some kind of play, program Gao 236

// 999. poor signal. NEST GERMANY dunno which one-11/21 0437 male w/00 talk then male 576

singer, no QAM. NORWAY MRX Vigra 11/21 0533 male opers type singer // 131h, elso 630 w/IS 11/23 0456.

GREENLAND Godhavn 11/20 1139 male with Danish talk then enoir ax 650 // 750, 850. Foor signal.

USSH Murmonak 11/22 0544 female anner, silence, 0545 female again not // 666 also 11/23 0452 male with talk // Program One on 999, not // 666.

LITHUANIAN SSR Vilnius 11/22 Olho rapid singing w/Red Army type 666 choir, 11/23 0453 chair type mx, not // Progrem One, noted 0500 pips and news sounder and then Program One.

NORWAY NRK Bodo 11/22 0550 male with talk then religious type 675 singingm noted // oh0 but not 1311;,

NORWAY NEW Vadso 11/23 0451 TT // 675, also IS, 0456 // 630, 675,

1314, 1485 but nothing noted on 155 and 216. LIBYA Jefren etc. 11/23 0120 AA wailing // 1251.

HAWAII KUAI Kuyai 11/19 1521 TC and Burger King spot, 11/20 1104 720 femule anner w/jezz type pgm, maybe 24 hours now to combat the

POLAND Poznan 11/21 Oujb male anner then mx, not KE but caw 738 scunding // 1000.

UNID 11/22 Oh47 female samer w/very levely talk, could not pick 147 out the lingo. Xint.

GREENLAND Umanak 11/19 1456 male with Danish talk topping KPQD. 750

WEST GERMANY DLF Braunschweig 11/21 C450 male with 66 telk. SPAIN RNE1 Ceceres etc. 11/22 C429 woman with 88 telk, fair. 150 774

EAST GEREARY Burg 11/22 Oh15 male with GG totk, xint. 783 000 ALASKA KINY Juneau 11/21 Ob58 Tom Parsons with TC and all Alaska from her to Nome is on Yukon Standard time per pgm on Kustw, this is a one year trial. 0700 Hour of Decision, 0727 Country Parsons Show till 21:00 LT s/off.

USSR Leningrad 11/22 0500 news souner, messave signal, 11/23 0300

USSH anthem // 999, 1350. ALASKA KCEP Fairbanks 11/22 new ID's between football game 0302 820 "50,000 watt clear channel, KCBF Fairbanks", 0401 "50,000 watts

at 0-20, we are aUBF rairbanks, the news center\*. AUSTRALIA LRA Rockhampton 11/19 1513 probably the atm carrying 03/E rugby via BBC WS on Radio One.

USSH Moscow 11/23 OhO6 male with talk // 999, fair.

850 GREENALND Upernavik 11/19 1443 Yemsle w/Denish talk, best from

Gronlands here but 00 on 24 hours. USSR Mezen 11/21 0456 male opera singing 11/22 0435 male and female w/slow talk, maybe educational program, // 1125, all program 3. Noted w/Mayak IS 0259 listed s/off, Heard more often then this, maybe another power increase due for KSKO?

TURKEY Antalys 11/23 0207 AA mx, fair signal // 1062. 891

Pidl Lautoka 11/22 0720 male with weather then news item about 195 possible independence of New Caledonia in 1985.

SASKATCHEWAN CKBI Prince Albert 11/21 0317 male w/Ukrainian

sounding talk, 0350 choir mx, faded on hour but CKB1 noted after. TTALY Milano 11/21 0442 female opers singer, xlat signal, // 546 just pudible.

ENGLAND BBC 2 Moorside Edge 11/23 31D 0405 montioning everything 909 for you on BBC radio 2, // 882 good.

USSR Hezem 11/23 0259 noted W/Hayak IS // 873 Mezen elso, noted earlier 0222 w/chorus type mx, // 972, poor sig w/KSRN and LPRT

BELGIUM BHT1 Wolvertem 11/22 0511 male w/Dutch talk, then female 927 singer, FP song, good.

WEST GERMANY R. Bremen 11/21 0512 rr mx, 11/23 -114 EE rr mx, U117 GG ballad.

Eric Buenemen-Hezolwood, MO Harold Prodge-Midland, MI George Hakiel-W. Islip, MY Wayne Heimen-Aurora, CO Noil Kazaross-Ogunquit, ME Roneld Perdue-Byron, MN Jim Henfrew-Rochester, KY Paul Swearingen-Sun Velley, CA Brian Vernon-Elsa, Yukon Jack Woods-Corvallis, Orc.

DX200, SM2 DX302, 185 LW R70, R7A, phusing unit R390A, MW1 Loop RYO, loops, LW's, phosing units, tuners DX300, Palomer loop HQ150, SH1 HQ180, Martons loop FRG7000, R7A, 6 LW's Hammerlund REG, NRC loop

And those are the contributors from last time and this time. A welcome to Honsid Perdue and Jack Woods from Minnesots and Oregon respectively, states that we need reports from more often. I do hope that everyone is enjoying the notidays and finding time to do things they enjoy ..... If you find some DX'ing time, drop me a line. Mc, I'll DX a little and also play with my newest computer and plan a diet to remody the effects of the holidays/parties/etc. Sec everyone next time.



				DOM	TENT S	PANDIN	25 an e	r 12/	18/83
	A	B	C	D	Ē	F	Ç	н	Y
Jim Renfrew, NY	240	41	0	0	0	0	7	2	04
George Sherman, MH	230	45	25	0	0	0	4	1	
Armia Littok, ON	170	45 37 20	0	0	0	0	4	3	03
Bill Hardy, WA	125	20	0	0	0	0	2	5	05
Hancy Hardy, WA	97	22	0	0	0	0	1	5	05
Earl Forth, IL	62	37	0	0	0	0	1	Ď	
Paul Stephan, CT	61	24	0	0	D	0	1	1	02
Bruce Conti, RI	48	35	D	0	0	D	0	1	03
Mike Hogan, IL	45	20	0	0	0	0	1	0	
					None	ontesta	int		
No	429	51	46	27	D	0	_3	3	

See last contest report for what the symbols mean.

So far, the following people report the logging of new stations as a direct result of participating in this year's contest. The number of new stations logged follows their names.

Bill Hardy... 25 Mancy Hardy... 25 Bruce Conti... 05 Jim Henfrew... 11 Mo... 07

You can see by the above that the contest is an aid to logging new stations. There is still time to enter. Send so the 75c entry fee & a list of 25 most wanted stations (they must not have been logged ever under any call letters) within 10 days that this appears in BNN. Even if you don't win a prise, you still will get new loggings just by trying for points. In indicator that this has been a great season, so far, in that I have reached level 3 in the states already. That was only done one time in the past & that took an entire year. For those of you she are far behind in the contest don't be discouraged. Each year that this contest was used previously, the person she jumped out in front early was not the winner. This contest was designed to get harder as you increase in level. This means that sensons with a clow start can still catch up. I would guess that the record number of points, 482 by Mike Jesiorski, will fall.

#### Texaco Metropolitan Opera Radio Network: 1983-84 Season

The Matropolitan Opera broadcasts occur Saturday afternoons from December 3 through April 21. Most broadcasts begin at 2:00 FM (EST), but ten begin earlier. The unjority of the network is comprised of FM stations; here are the AM stations. The list comes from "Opera News", December 10, 1983.

			Andalusia	KGGF	690-KA	Coffeyville	WOKE	1360-sc	Charleston
	MOOA	1170-AL	Montgomary	KXXX		Colby	KUSD		Vermillion
			Homer wat	KHAN	1350-KA	Hanbattan			Canyon-Amarillo
			Yuna	WAKE	1240-MB	Milinockett	KSEY	1230-TV	Saynour
	KMIC	1320-48	Fort Smith			Quberland	KWEIO	860-IIT	Salt Lake City
	KD/IPC	1560-CA	Hakersfield			Doyle	CHEST	1400-57	Brattleboro
	KBIF	900-CA	France	KFUO	850-HO	Cinyton			Pellman
	KFAC	1330-CA	Los Angeles	KZIA	1580-NM	Albuquerque			Auburndale
			San Francisco	WOXR	1560-NY	New York			Buffala
			Washington			Utica-Romo	Pipila	1430-41	MIELUIG
			Daytons			Belmont-Charlotte		**** ***	
	WDBF	1420-YL	Delray Bonch	LICTOR	1490-90	Valdese			
	WSST	800-FL	Largo			Washington	CHR		Calgary
	WILN	1520-FT	Orlando	SWHIT	1340-01	Athena	CBX		Edmonton
	MCASE	1340-GA	Arbana				CBZ		Fredericton
			Columbus			Hariotta	CBD		Saint John
		1400-GA				Corvallis	CBE		Halifax
							CRM	940-PQ	Montreal
			Wayeross				CBO	920-PQ	Ottawa
	KTOX.			KMRC	1430-LA	Morgan City	CBK	540-5A	Regina
	TYCK	1340-10	Mailey-Sun Valley				CBN	640-NF	Smint Johns
	NBAA	. 920-IN	Lafayette			Philadelphia	CBQ	BOO-ON	Thunder Bay
	MKIN	1560-IN	Rensselacr	MALL	730-PA	Pittsburgh	CIL	740-0N	Toronto
	MUCD	1390-IN	Seymour	WIPR	940-PR	San Juan ***	CBU	690-BC	Vancouver
-	KMKY	1150-IA	Des Maines	DEMM	1370-RI		CHE	1550-ON	
									112100002

For additional CBC stations (both French and English), check local listings.
\*\*\* Tape delay Barry S. Finkel

In October of 1983 the FCC mailed 2,357 daytime stations their long promised and long awaited authorizations for Post Sunset operation under Section 73.99. Most daytimers had been expecting operations to be allowed up to two hours after local sunset with moderatly reduced powers. Stations with PSA (Pre Sunrise Authority) expected their PSSA powers to be substantially the same. Most got a lot less than they expected. According to James McKinney, FCC Mass Mcdia Bureau Chief, only 87 stations got powers from 400 to 500 watts. The breakdown was:

THE POST SUNSET AUTHORITY: THE DAYTIMER'S DILEMMA

-Jerry Starr

Power in watts:	Number of stations:
400-500	87
300-400	51
200-300	152
100-200	350
75-100	218
50-75	393
25-50	500
1-25	508

There were 98 hapless stations that got NO PSSA at all. In addition to the low power, most stations were assigned different power levels for different months. Some stations got PSSA for less than 12 months per year. Several have PSSA for December only. Power levels, determined by the FCC computer using a number of complex parameters including the diurnal curves, field strengths, station spacing, etc, are very confusing. Many stations have THIRTEEN different power levels in a year. To complicate matters more, daytimers on clear channels also have Phase One powers and Phase Two powers. By FCC definition, they are:

PHASE ONE is the period beginning at licensed signoff and extending until sunset at the relevant Class 1 dominant station on your frequency.

PHASE TWO begins at local sunset or at the end of Phase One (if authroized that month) and extends to 6:00 PM local time.

In Figure 1 you will see a partial reproduction of the notice sent to a station on 1000 kHz. Notice that each month has a different power level, plus the additional Phase Iwo power. The complications continue. Note that the operating schedule varies from 30 minutes to 90 minutes after normal signoff. In this case the hours get shorter in the summer. In others, the summer hours are longer. Let's count it up for our 1000 kHz station so far: That's 13 different powers, five different times. To top it all off, each station's authorization includes this warning: NO OPERATION beyond 6:00 PM local time is permitted NOTMITHSTANDING the hours listed above. Nearly all of the daytimers will be able to use their PSSA in just a few winter months despite their elaborate power and time schedules. By springtime most daytimer's normal signoff times will be after 6:00 PM anyway. An additional caveat notes that NO PSSA operations are permitted at this time.

It was my intention to publish a list of all PSSA powers in AM Switch, but that was back in the naive days when we assumed each station would have but one power and schedule. I have obtained a complete FCC computer printout for all daytime stations and it is massive, 524 pages to be exact. Figure 2 is a sample page from this printout. You'll notice that WOAP has 13 different powers and 5 times. KYMN got PSSA for only seven months with no two powers alike. The printout goes on like this page after page. Needless to say, we will not be publishing this information. To do so would require an AM Switch TWICE as thick as the NRC Log! If any member feels the need to have all this information it can be obtained from Downtown Copy Center, the company in DC that has the contract to reproduce all the FCC documents. They will charge you around \$60 for the whole mess. In an attempt to provide SOME sort of useful information, I will soon publish the list of stations that got NO PSSA. If a station is not on the list, you can assume that it has some sort of extended hours authorized. Whether all stations will use their PSSA is questionable. Many of the 508 in the lowest power catagory got only I or 2 watts and it is doubtful that such limited coverage would justify the expense of equipment modification and additional staff hours. The frustration of daytime broadcasters was expressed by Alan Moore, GM of WILY-1020. He is quoted in Broadcasting Magazing as saying "You can yell farther than that."

NOTE: On 12/2/83 the U.S. and Canada signed the bilateral agreement making PSSA operation possible and the FCC authorized the start-up of these operations immediatly. You should be hearing some of these any day.

#### PHASE ONE OPERATING PARAMETERS

HONTH	ANTENNA CURRENT CONVERSION FACTOR	NOMINAL -	HOURS HIM. PAST NORMAL SIGN OFF
YRAUMAL	0. 12	134, 9 WATTS	0: 45
FEBRUARY	0.11	126. 8 WATTS	D: 45
HARCH	0.11	116.8 WATTS	1:00
APRIL	0.10	106, 1 WATTS	1:15
MAY	0.09	89. 6 WATTS	1:15
JUNE	0.09	82. O WATTS	1:30
JULY	0.09	84. 0 WATTS	1:30
AUGUST	0.10	96. 7 WATTS	1:15
SEPTEMBER	0. 11	115.7 WATTS	1:00
OCTOBER	0.11	123. 2 WATTS	1:00
NOVEMBER	0, 11	131.7 WATTS	0:45
DECEMBER	0. 12	137. B WATTS	0; 30

PHASE 2 ANTENNA CURRENT CONVERSION FACTOR 0, 03 NOMINAL POWER D. 3 WATTS

ANTENNA SYSTEM USED: DAYTIME (LICENSE)

. NOTE: Antenna current or common point current permitted during PSSA is obtained by multiplying the ANTENNA CURRENT CONVERSION FACTOR with the authorized antenna current or common point current. Antenna input power permitted during PSSA is obtained by taking the SOUARE of the ANTERNA CURRENT CONVERSION FACTOR and multiplying with the ANTENNA INPUT POWER listed on the station authorization

NOTE: NO PSSA OPERATION IS PERHITTED AT THIS TIME. Notice will be given by the Conmission upon signing of a new bilateral agreement with Canada, which is expected in the near future. Thoreafter, such operation may commence only on submission of the following information to Chief, AM Branch. Audio Services Division, Mass Media Bureau Room 342:

- 1. Licensee name , station call sign and location
- 2. Indication that PSSA operation is intended by the station
- 3. A description of the method whereby any necessary power reduction will be achieved

#### FIGURE 2

STATE: HI AUTHORIZATION: L ANTERNA: D CALL: NOAP CITY: OHOSSO FREQUENCY: 1080KIIZ

	PILASE 1 FACTOR	NOHINAL POWER	BDURS HER	LIHITENG	STATION
KORTII		4,5	1:15	HTTC	
JANUARY		5.0	1:00	UTIC	
FEBRUAR	0.07 0.08	5.8	0:45	WIIC	
HARCH		7.6	0:45	WTIC	
APRIL	0.07	10.7	0:30	WILC	
JUNE	0.12	13.5	0:15	HTIC	
	0.11	12.0	0:15	HTIC	
AUGUST	0.09	8.8	0:30	HTIC	
The second secon		6.5	0:45	HTIC	
DCTOBER		5.4	1:00	WTIC	
	7.00	4.7	1:15	WIIC	
NOVERBE		4.3	1:15	WITE	

PHASE 2 FACTOR 0.06 HOMINAL POHER 3.6 WATTS LIMITING STATION: WITE

STATE: 101 ABTHORIZATION: L ANTENNA: D CALL: KYRR CITY: NORTHFIELD FREQUENCY: 1080KHZ

HONTH	PHASE 1 FACTOR	SOMINAL POWER	HOURS HIN	ROTTATE SELTIME
YANIJIAK	9.27	63.0	0:45	WIIC
FERRUARY	0.24	56.5	0:30	MILC
SIVICI	0.27	75.4	0:15	HTIC
SEPTEMBER	0.31	94.9	0:15	HTIC
DETOBER	0.25	64.4	0:30	MTIC
NOVERBER	0.22	50.5	D: 45	WITIC
DECEMBER	0.21	45.7	0:45	MAIC

4.1 WATTS LIMITING STATION: KILD PHASE 2 FACTOR 0.06 NOMINAL POWER

NEWS RELEASE JOHN D. BOWKER

Howe media intermetion 202 / 254-7674 Recorded feting of releases and leafs 202 / 532-0002

IONS COMMISSION 1919 M STREET, N.W. WASHINGTON, D.C. 20554

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This is an unorticus announcement of Commission action. Astesse of the full text a Commission state (Originalist or course across See Mid.) - PCC, 315 F 35 MM (ID. C. Cart. 1975)

December 9, 1983

PIRATE RADIO OPERATOR SENTENCED

On November 22, 1983, Victor G. Alcorn of Sayville, New York was sentenced to 18 months of probation and ordered to pay a \$750 fine for operating an unlicensed AM radio broadcast station in violation of Section 301 of the Communications Act.

The sentence, handed down by the Federal Magistrate David Jordan of the U.S. District Court for Eastern New York, followed prosecution by the U.S. Attorney on evidence gathered by the FCC's New York District Office. Altorn pleaded guilty to charges contained in a four count criminal information filed against him. Alcorn faced possible penalties of 4 years in prison, and a \$40,000 fine.

The charges were filed after Alcorn was arrested in July 1982, following an unlicensed broadcast, He had first been identified by the FCC New York engineers in 1981 as the operator of an unlicensed FM radio station responsible for a complaint of interference to the instrument landing system at MacArthur Airport in Islip, New York. Despite warnings and imposition of mometary forfeitures by the FCC. Alcorn continued to operate, challenging the FCC to catch him while attempting to avoid detection by repeatedly moving the location of his station, changing operating frequencies, and changing his hours of operation. These efforts were to no avail, and Alcorn was identified on several occasions by FCC engineers using sophisticated direction-finding techniques as being responsible for the unauthorized transmissions. Alcorn had generated considerable publicity for his unlicensed station, including news reports on commercial radio stations and newspapers.

The action against Alcorn was part of the FCC's continuing effort to take action against operators of unlicensed, or pirate radio stations. The operation of an unlicensed station is a violation of Federal Law, and frequently causes interference to radionavigation equipment, home entertainment receivers, and other authorized users of the radio spectrum.

An FCC spokesperson emphasized that other pirate radio operators would face stiff penalties and fines when caught by FCC enforcement engineers.

For further information, contact Alexander Zimny at (212) 620-3437.

### FCC recalls call sign rules

Commission scraps its regulation of cell letters; any disputes will now have to be sattled in court; it also proposes to allow expended use for AM carriers

Don't bother the FCC with call sign disputes.

From now on, the commission will still "From now on, the commission will said
"Issue call signs, but if a not going to do much
more. For example, it will no longer require
call signs to be as "good usite." Nor wall it
require those requesting new calls, or call
changes, to notify every station within 35
calles. And disputes over whether a new call
too closely examples another will have to be addressed in the courts.

"Basically we're getting out of the call sign business," explained Robert Hayne, an allorney for the PCC Mass Media Burena.

The commission, at an open meeting last week, backed out of the business 3-1, with Chairman Mark Fowler concurring and Commissioner James Quello dissenting. The only issue appeared to be whether the commission should stall—as the Mass Media Hureau had recommended-require calls to he in "good taste."

James McKinney, Mass Media Bureau chief, was all for retaining that remnant of costeol, contending "it wouldn't be proper" for an agency of the federal government to issue "clearly obscene" or "indecest" call signs, Quello said he would "feet safer" re-taining that control. But Commissioner Mimi Dawson said she had "a real problem" with "being an arbiter of good teste" and managed enough votes to get the bureau to rewrite the item to her liking.

After the meeting, Hayne explained that contending with call sign disputes had become a "etal burden" at the FCC. The only real gentral the FCC will keep is insuring that the same calls aren't being used by more than one breadcaster. (Group owners, how-ever, will be allowed to use the same call three times, as long as the stations aren't in the same service, he added. A broadcaster can use the same call he uses for an AM fee one FM and one TV, as long as the last two include the suffices "-FM" and "-TV-") Also expunged from the books was the rule under which the commission had refused to reassign a call that had been relinquished in a

Hayne added that, under the new order, a broadcaster who wants to challenge a call sign can in local courts under "unfair compecition" statutes. If a community objects to a call, considering it indecent or obscene, it

eall, considering it indecent or obscene, it can "make its displeasure known to the station or the advertiser," Hayne said.

In other action, the FCC proposed to expand the variety of nonfrendens services that can be offered on an AM broadcaster's carrier frequencies.

Among the proposals the FCC wants comment on its whether it should refrain from coming to with provider technical standards.

coming up with specific technical standards for the secondary use of AM carrier signals. It also proposed to require broadcasters to retain control of broadcast-related services using AM carrier signals, but proposed to exempt those offerings from statutory broad-

emt tequirements. Also according to the proposal, if a licensee determines the service he wants to offer is common carriage, he must seek authoriza-Carrier Bureau and from state regulatory

BROTOCHTME 12-5:23

#### AUTOMOBILE RADIOS

USING AN AUTOMOBILE RADIO TO DX

H.E. Rebensdorf, Harvard, Illinois, apparently not lacking in ingenuity, judging from this letter, quoted herewith:

"When your magazine started with this DX corner and gave the schedules of the early morning broadcasts I didn't have what I considered to be a suitable receiver so about Christmas time I took out the set that I had in the cor and started to DX with that. Up to date I have received 316 stations with it, using it upstairs in my room with a 20 foot aerial-that is 20 feet of wire strung around the room for an aerial. These include 27 stations in California, 1 in Monolulu, 2 in British Columbia, 4 in Oregon, 8 in Washington, 5 in Mexico, 10 in Canada etc."

The above offers a practical suggestion to those who have radio-equipped cars laid up for the winter. Many present-day radio sets are extremely sensitive and offer the advantage that almost any piece of wire will serve as an adequate antenna. The power supply offers no problem because the storage battery can be removed from the car also.

Hr. Rememberf is another fan who thinks highly of the "Calavan" antenna idea. He is going to try it out and suggests that "airplane hadn't try to land around here after next week or they'll get tangled up plenty in aerial wire strung all over the vicinity.

GUESTION? What company pioneered the use of a radio in an automobile?

ANSHER-Motorola

NRBA PLANS CHALLENGE

RIRFriday, December 10, 1983

### Broadcasters Cool To New Call Letter Freedom

Industry reaction to the FCC's complete overhaul of its call letter rules (R&R 12-9) seems to be mixed, but leaning towards the negative. Latest word from the Commission is that the changes will probably take effect January 20.

Under the new system, FCC niturney Beb Hayne says il will take stations only one day to get new ralls approved. After a quick check to make sure the letters aren't stready in use, the Commission will approve new calls by telegram, with no regard for "good taste" or phonetic similarity to other calls in the market.

#### Obscene Calls Too Risky, Say PDs

Program directors contacted by R&II weren't disturbed by the prospect of sug-section or obsequences in The PDs soom convinced few stations are likely to risk harting their position in the market by obtaining off-coine call fetters. "They'll receive to much aggravation from community leaders if they try something catesy," REZO/Donab PD Greg Gillespie forecast.

Also unverted about good taste is WKFM/Syacuse Operations Manager Cauck Lakefield. He's more coopered about cimilar-sounding call letters which could result in "servent-up Artifuto taba and claries and really messed-up-listeners".

WHOY/Medigenery PD Mark St. John commented, "Let the community decide what calls are proper or not. The broadcasters should have that on their minds," REEL/Expect PD Ken Merita agreed that blattatily observe calls oren't likely, although more subtle "duelle entendress" may arise. He added, "All this deregulation is starting to get out of hand. I think they've opened up a can of wrome and they're going to be sorry they let this get out of their coorder."

NREA President Berale Maan said his group will immediately file for partial re-consideration of the PCC action. Calling the shirt of disputes to local courts "extremely distressing," Mann said, "The vagaries and clears, the videly varying standards inherent in local litigation are a pror substitute for a function which rightfully rests with the Commission."

KZEL's Ken Martin agreed, saying, "Local courts aren't familiar with the types of problems that come up between broadcasters. And the courts are so overcrowded it could take months or years to settle something."

#### Instant Calls Change Popular

In general, the beordeasters seems to like the idea of being able to pick up new calls almost instantly, with no Noday delay. WKFM's Lakefield speculated, "That could open a lot of new radio wars."

One of the most controversial aspects of the FCC decision was abstition of the sto-day waiting period before dropped calls can be adopted by another station in the same market. But Artitron spokesman Allion Coate didn't seem overly concerned. "While we see no immediate impact."

"While we see no immediate impact ... ... there is a strong potential for instaled instances of listener confusion. These will require that Artiflore and say in cleaner touch with stations to be aware of call letter changes so we can continue to reliably and accurately record listening."

Code expressed confidence that diary data like alogues and frequencies, plus close attention to the date of call changes, will enable Arbitron to credit listening securately own under the new FDC rules. STATIONS CURRENTLY BROADCASTING WITH HOTOROLA C-QUAM STEREO

KRZY	1450	Albuquerque, MM
WSAR	1470	Allontown, PA
WASC	1140	Atmore, AL
WCHL	1360	Chapel Hill, NC
XCRX	570	Dallag, TX
WJR	760	Detroit, MI
KOMB	1550	Fargo, ND
WKQT	1010	Garyville, LA
WGSW	1350	Greenwood, SC
CKOC	1150	Hamilton, ON
WIRE	1430	Indianapolis, IN
WNDE	1260	Indianapolio, IN
CKOV	630	Kelowna, BC
WITL	1010	Lansing, NI
CFPL	980	London, ON
XFI	640	Los Angeles, CA
XZLA	1540	Los Angelos, CA
WISM	1480	Madison, WI
WSW	650	Nashville, TN
CKIN	980	Now Westminster, BC
KXXY	1340	Oklahone City, OK
CJSB	540	Ottawa, ON
KCH	620	Portland, OR
CJCI	620	Prince George, BC
WHWH	1350	Princeton, NJ
KIPN	1350	Pueblo, CO
KKLS	920	Rapid City, SD
KXXX	680	San Antonio, TX
KFHE	760	San Diego, CA
KYA	1260	San Francisco, CA
KRDZ	1230	Steamboat Springs, CO
KJOY	1280	Stockton, CA
CFRB	1010	Terente, ON
KAMG	740	Tulsa, OK
CJVB	1470	Vancouver, BC
CKWX	1130	Vancouver, BC
CKLW	800	Windsor, ON

COMMATSER

#### ASSEMBLY OF APT-2 TUNER

 Read the entire article thoroughly to get an idea of how to prepare for APT-2 construction. Keep the article at the workbench, as it will be necessary to refer to it constantly.

2. Obtain necessary parts (see parts lists).

3. Organize work area: Ensure that area is comfortable, well-lighted, and sufficiently spacious. The following tools and shop supplies should be available: accurate steel ruler, calipers, or micrometer; sharp-pointed metal scribe; several sizes of Phillips and "regular" (flat) screwdrivers; nutdrivers for 4-48 and 6-32 huts; variable-speed electric drill; drill bits (approx. dia. = 8.88 in.); small diagonal cutters; longnose pilers; slip joint pliers; soldering pencil (in the 25 to 45 watt range) with holder stand; rosin-core solder; solderwick; solder sucker; file; vise mounted on sturdy bench; X-Acto Knife; hacksaw; and digital-multimeter or volt-ohmeter.

 Verify that hole locations and diameters in the documentation conform to the parts acquired. Adjust hold list (Table 6), if necessary, before proceeding.

 Use ruler, scribe, and the hole list to mark hole locations on the chassis box. Push the scribe into the metal to a sufficient depth that the "pliot" drill bit will stay in place when preliminary drilling is done.

6. Drill all marked hole locations with the "pilot" bit.

Drill all holes with the .113 in. diameter bit.
 Drill all holes listed as .14 in. diameter or greater with the .14 in. diameter bit.

 Drill all holes listed as greater than .14 in, diameter and less than or equal to .25 in. diameter with the actual final size bit.

18. Drill all holes listed as being over .25 in. diameter with the .25 in. diameter with the .25 in. drill bit, and then with the actual final size drill bit.

11. Put chassis box aside (until step 18).

 Enlarge the mounting hole of the Main Tuning Capacitor (C5) by means of drilling with a .113 in. bit.

 Cut the perfboard (for the AI subassembly) to correct size (1.4 in. x 1.4 in.). Cuts should be made along straight rows and columns of board holes.

14. Drill four .113 in. diameter holes at the eventual screw locations near the perfloard corners, as indicated in Figure 4 (the A1 layout drawing).

15. Hount components onto perfboard: refer to Figure 4 (layout), Figure 3

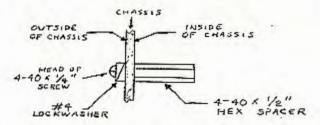
(schematic), and Tables 4 & 5 (levels 3 & 4 parts lists).

16. Connect components together on underside of perfobard; use busswire where necessary. The dashed lines in Figure 4 indicate physical locations of underside connections. The A1 schematic should also help. Solder the connections and cut off excessive leads. Screws, lockwashers, and solder lug will be added to A1 later.

17. Put the assembled Al card aside temporarily.

18. Install hardware assemblies at TOP side chassis box holes 28, 21, 22, and 23: refer to Figure 6. The spacers thereby installed are used for subsequent mounting of the A1 card inside the chassis box.

#### FIGURE 6

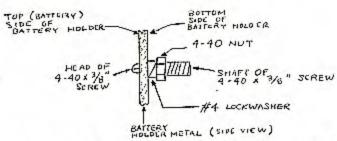


19. Four additional 4-48 x .25 screws, three #4 lock-washers, and a #4 solder lug should be kept aside for subsequent mounting of the Al Front End Card (step 38).

28. Prepare the battery holder for mounting by installing two hardware assembles of the type shown in Figure 7. One assembly is to be installed at each of the two holes on the battery clip. The nuts and lockwashers installed at this time are essentially being used as short spacers.



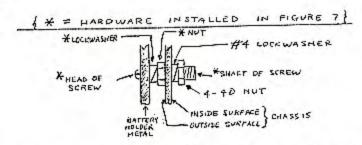




21. Place the battery holder on the chassis box so that its connector clips are close to the right edge of the TOP side of the chassis. The screw shafts of Figure 7 should be inserted into TOP side holes 24 and 25.

22. Mount the battery holder to the chassis with hardware as indicated in Figure 8.

#### FIGURE &



23. If desired, reduce the shaft length of S2, the 12-position switch; to about 8.75 in. (use a hacksaw, place shaft of switch in bench vise). Remove hardware from shaft (until step 26).

24. Assemble inductors onto the 12-position switch (S2): Start by locating the switch pin immediately adjacent to the locating tab (in a counterclockwise (CCW) direction, as viewed from the connection side (back) of the switch]. Solder one end of the 4.7 mH inductor to that pin; leave the other lead free. To the next switch contact pin, going COW (as viewed from back of switch), solder one lead of the 2.2 mH inductor. To subsequent (increasingly CCW) pins, install one end of each of the following inductors: 1 mH, 478uH, 228 uH, 188 uH, 47uH, 22uH, 18uH, 4.7 uH, & (finally) 2.2 uH. There will be one (outer) contact pin left open (that between 2.2 uH & 4.7 uH); the wiper arm (inner) pin will also, at present, be free of any connections.

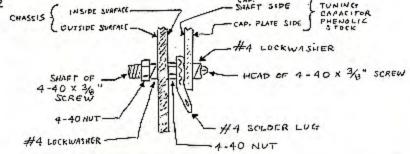
25. Connect all of the free inductor leads together with a busswire to form a circular wirte ring about an inch from the switch contact connection pins. Solder leads & cut off excesive wires.

26. Install the 12-position inductor [Freq. Range] switch SZ onto the chassis box: switch body inside box; shaft through TOP side hole 18; tab to TOP hole il. Secure S2 by using the nut & the washer supplied with the switch.

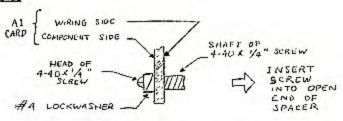
27. Remove the OUTER of the two nuts from the shaft of the Main Tuning Capacitor. Do not disturb the INNER shaft nut. Set the outer nut aside until step 29.

28. Mount the Main Tuning Capacitor (C5) at TOP side hole I by using the hardware assembly depicted in Figure 9. The capacitor shaft should protrude TOP side hole 2.

#### FIGURE 9



#### FIGURE 13

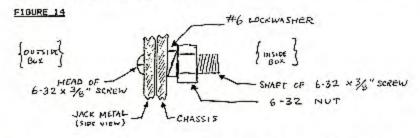


39. Install red banana binding-post jack (J2) at LEFT side hole 5: use nut and lockwasher supplied with jack.

48. Install black banana binding post Jack (J3) at LEFT side hole 4: use nut

and lockwasher supplied with Jack.

41. Install Motorola Jack (J1) body through LEFT side hole 2. Position the screw holes on the jack so they line up with LEFT side holes 1 and 3. Mount the Jack according to Figure 14.



42. Install Motorcia jack (J6) body through RIGHT side hole 7. Use the same hardware scheme as employed in Figure 14: J6 is to be secured at RIGHT side holes 6 and 8.

43. Install the B+ feedthrough capacitor (C7) at RIGHT side hole I: use hardware supplied with capacitor.

44. Install BNC Jack (JS) at RIGHT side hole 5: use hardware supplied with jack.

45. Install the 580 ohm pot (R4) at RIGHT side hole 3 (shaft) and hole 4 (tab): use hardware supplied with pot.

46. Install (supplied) dial Knob on C5 (Main Tune Cap.).

47. Install Mouser type 45KN813 Knobs on the shafts of Co, S1, 62, R2, & R4.

Set pointers as follows:

Co Pointer at 3 o'clock with c' plates fully meshed

\$1 Pointer halfway between 9 and 12 o'clock with SI at most-counter

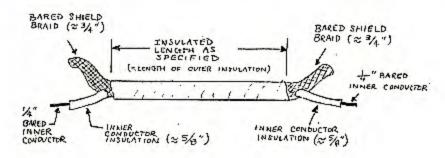
clockwise (CCW) position

Pointer at 6 o'clock with switch-contactor at presently-open pin between the 2.2 uH and the 4.7 mH inductors.

Pointer at 8 o'clock with pot fully CCW Pointer at 8 o'clock with not fully CCM

48. Prepare five lengths of RG174 or RG188 coaxial cable in the manner shown in Figure 15. Three of he cables are each to have an insulated length of 3 inches; one should have an insulated length of 4 inches; and one should have an insulated length of 5 inches.

#### FIGURE 15



29. The shaft of the Main Tuning Capacitor should be secured by attaching the nut removed in step 27.

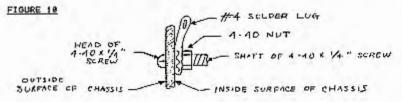
30. Place the Vernier Cap. (C6) inside the box so that its shaft protrudes through TOP side hole 5. The rotor lug of C6 should be pointing towards C5. Secure C6 by means of a 4-48 x .375 screw and M4 lockwasher at TOP side hole ? and with the same type hardware at TOP side hole 6.

21. Mount the 4-position rotary switch (SI) by using the hardware supplied with the switch. The shaft should exit the chassis box at TOP side hole 7; the locating tab should be in TOP side hole B.

32. Mount the SPDT on/off/on switch (54) at TOP hole 12 (shaft) and TOP hole 13 Itab on locating washerly use hardware supplied with the switch.

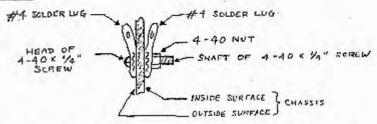
Mount the SPDT on/on switch (SS) at TOP hole 14 (shaft) and TOP hole 15 Etab on locating washer]; use hardware supplied with the switch.

34. Mount grounding hardware assemblies: G4 at LEFT side hole 6, G1 at TOP side hole 9, and 62 at TOP side hole 17. Each assembly should resemble Figure 18.



35. Hount grounding hardware assembly 63, in accordance with Figure 11, at RIGHT side hole 2.

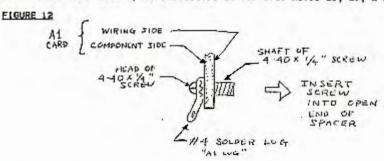
#### FIGURE 11



36. Install a BNC Jack (J4) at TOP side hole 14: use the nut & the lockwasher provided with the jack.

Install the 1K pot (R2) at TOP side hole 18 (shaft) and hole 19 (tab): use hardware supplied with pot.

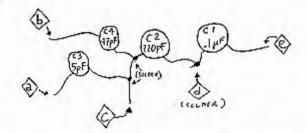
38. Mount the Al card on the four spacers installed in step 17. The component side of the card faces away from the spacers, the wiring side faces toward the spacers. The side of the Al card with P5, the RF-out pushpin, should be oriented so that it is closest to, and parallel to, the inside of the chassis box RIGHT side (which appears to be the left side as you view the inside of the box with the bottom cover off). Figure 12 shows the hardware to be used at the 'card screw 4' location (the lower right corner of the A1 card if the card is observed from the underside of the box/ component side of the card); this hardware mates with the spacer at chassis TOP side hole 23. Figure 13 shows the hardware used at the other three Al card corner holes: these mate with spacers situated at TOP side holes 28, 21, & 22,



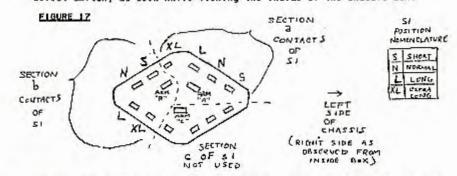
49. Use solder to "tin" all bared leads of the above cables. 50. Fabricate the component assembly of Figure 14. Make note of the lead

designations assigned.

#### FIGURE 16



51. Observe Figure 17, a view of the contacts of SI, the antenna Length Select switch, as seen while viewing the inside of the chassis box.



52. Connect (by soldering, then cutting excess leads) the component assembly of Figure 16 to SI contacts of Figure 17 in accordance with the following listlead "a" to Si, section a, wiper arm

lead "b" to SI, section a, "N' contact lead "c" to SI, section a, "S' contact lead "d" to 2-inch piece of hookup wire

other end of "d" hookup wire to SI, section b, wiper arm lead "e" to J1 (wire in Jack)

53. Connect a 47 ohm resistor (R1) from SI, section b, "XL" contact to the upper pin of \$3.

54. Solder one (shortened) lead of a 150 ohm resistor (R3) to J5. Attach a .1 of capacitor (CO) to the other lead of R3. (The lead length at the C8/R3 Junction should be as short as possible). Solder the free lead end of C8 to the R4 CCW pin I the contact of the R4 pot which measures zero-ohms to the R4 wiper arm when R4 is set fully CDW as viewed from the outside (right side) of the chassis box).

55. Place a 22 pF capacitor (CIS) from the upper pin of S4 to the lower pin of S4. Minimise lead lengths. Solder; then cut off excessive leads.

56. Solder the shortened lead of a 68 pF capacitor (CP) to the wiper arm of R4. Let the other C? lead hang free, until assembly step 59.

57. Prepare eleven (11) pieces of insulated hookup wire, each with bared and solder-timed ends of approx. 3/16 inch. The lengths of hookup wire to be prepared are as follows llengths specified in terms of INSULATED length; add approx. 3/6 in. for total lengths]:

1 in. (2 pieces) 2 In. (5 pieces) 2.5 in. (3 pieces) 4 In. (1 piece)

58. Connect BARE SOLID BUSS WIRES (5 total): one wire (of the shortest possible length) between each following pair of points:

[1] J3 & 64 lug

[2] Có rotor pin & C5 GND lug (that of Fig.9)

[31 C5 GND lug & C5 rotor lug [4] upper pin, \$3 & 61 lug

[51 R2, CW pin & G2 lug. Solder each connection & cut off excessive busswires. 59. Install the coaxial cables which were prepared in step 48; Those should be

Installed in accordance with Table 7.

Inote: L ring is busswire ring of assembly step 251

All connections should be properly soldered and trimmed.

68/61. Install the hookup wires which were prepared in step 57.

68. The first 2 connections to be made are on the outside of the chassis box:

[11] solder one end of a 2 inch hookup wire to the POSITIUE (+) battery

bracket (J7) terminal; solder the other end of this wire to the external

lead of feedthrough C7. [2] Solder one end of a 2 inch wire to the

NEGATIVE (-) terminal of the (J7) battery bracket; solder the other end

of this wire to the exterior G3 lug.

61. Connect (by soldering) 9 hookup wires on the inside of the chassis box in accordance with Table 8.

#### TABLE 8

Insulation Length (in.)	End 1 to	End 2 to
1	S4, upper pin	PI of Al
1	Al lug (Fig. 12)	P4 of Al
2	SI, section a, arm	Co, stator pin
2	Cé, stator pin	52, arm
2	J5	36
2.5	JI	J2
2.5	C6, stator pin	C5, stator pin
2.5	S3, arm	PB of A1
4	S3, lower pin	C7

ASSEMBLY OF THE APT-2 TLNER IS NOW COMPLETED.

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DX

BEFORE "powering-up", check all wiring against the schematics (Figures 1 & 2 at the beginning of the article). Clean flux from all solder joints with a cotton swab dipped in alcohol. Use an air gun, if available, to blow wire, insulation, and solder scraps out of the chassis box. Screw the bottom cover onto the chassis box with the 4 sheet-metal screws provided with the box. Affix gummed labels, if desired, near controls and Jacks.

You may now proceed to the section on Using the APT-2. It is best to practice using the tuner on the Mu broadcast band during steady-state daytime conditions in order to gain familiarity with its operation; fading signals could confuse things in the beginning.

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#### USING THE APT-2

1.8 NORMAL TUNING (wire or Car whip operation)

1.8.8 Initialization

1.8.1 Set SI to "extra-long" If wire length exceeds 388 feet in an area with no strong local stations [hereafter defined as "rural" area] or if antenna is longer than 208 feet in an area with strong local signals [hereafter defined as an "urban" area]. Set SI to "long" if the antenna is shorter than the "extra-long" specification, but longer than 288 feet (rural) or 58 feet (urban). Set SI to "normal" if the antenna is shorter than the "long" specifications, but longer than 28 feet. Set SI to "short" if antenna is 28 feet or shorter. Double all length specs. if operating frequency is lower than 488 KHz.

1.8.2 Connect the appropriate antenna to Jt or J2.

1.8.3 Set S4 to center (regeneration off).

1.8.4 Set C5 & C6 to center (variable capacitors half-meshed).

1.8.5 R2 to fully counterclockwise (CCM): (maximum ouput level).

1.8.6 R4 position doesn't matter at this time.

1.8.7 Connect receiver, with coaxial cable, to J5 or J6. The receiver should be of a shielded (metal case) variety. A transistor portable radio can be used if its rod antenna is kept far enough from the wire aerial to prevent unwanted feedback and instability.

1.8.8 53 (power) to ON (up).

1.8.9 S2, the frequency range switch, can be preset by referring to Table 1; this, however, is optional: S2 will be accurately set in steps 1.1.1 to 1.1.3.

1.1.6 Tuning

1.1.1 Run S2 through all of its positions: find the position which yields the maximum DESIRED FREQUENCY signal. (Don't peak on a spur!)

1.1.2 Adjust C5 for peak signal. If C5 yields maximum signal at fully open f16 on C5 diall, move S2 one step clockwise (CW) (=next lowest value inductor) and then repeak C5. If C5 had yielded maximum signal at fully meshed (5.3 on C5 diall, move S2 one step CCW= '(next highest inductor) and repeak C5.

1.1.3 If, in step 1.1.2, a good peak couldn't be found, or, as the desired signal peaked, an off-channel station's audio simultaneously became clear (e.g. spur or cross-modulation overloading), set SI one position CW (next longer-antenna position) and re-iterate steps 1.1.1. & 1.1.2.

2.8 REGENERATIVE TUNING for higher gain and selectivity

NOTES: [1] With APT-2 design, regeneration is only used at frequencies lower than 2 MHz. [2] the battery must be "fresh" (7 volts minimum, loaded) for regeneration to work properly, even though "normal" tuning can be achieved with batteries running as low as 5 volts.

.8.9 Initialization

2.6.1 Tune the antenna "normally" by performing all Part 1 steps.

2.8.2 Set R2 to fully Cd (=minimum putput level).

2.6.3 If operating frequency is les than 486 KHz, set SI to 'normal' and go to step 2.1.7.

2.6.4 Set S4 to Regenerate-A (Up) (C18 in regen. line). .

2.8.5 Set R4 to center of range (pointer at 12 o'clock).

2.1.8 Tune/Regenerate

2.1.1 Slowly turn R2 CCW until the desired signal is just above the noise level.

2.1.2 Adjust C5 for peak: this will typically be at a higher dial position (lower capacitance) than had been set in the normal tuning procedure. If maximum signal occures with C5 at min. C [= '16' on C5 dial], set S2 one step CW (next lowest inductor) and repeak C5. If, at any time, regeneration (squealing) breaks out, move R2 slightly CW until it stops.

2.1.3 After CS has been peaked, gradually turn R2 slightly CCW in SMALL INCREMENTS, while simultaneously repeaking C5 after each incremental R2 adjustment.

2.1.4 When regeneration breaks out, or when selectivity is so tight that received audio becomes "mushy", carefully play C5 & R2 so that, to the best of your ability, you have a C5-peaked-signal condition at the

'borderline of regeneration', as set by R2.

2.1.5 At this point C6 (the vernier tune capacitor) and R4 (the regeneration vernier pot) can be "played" for fine adjustment of peaking and desired selectivity. Anytime R4 is adjusted, C6 (and/or C5) will have to be retweaked for a peak.

- 2.1.6 If, in step 2.1.4, regeneration did not occur, set R4 to min. R (fully CCW; pointer at 8 o'clock) and re-iterate steps 2.1.1 thru 2.1.5. If regeneration still doesn't occur, go to step 2.1.7.
- 2.1.7 If you could not achieve regeneration in the previous steps, or if the frequency is less than 486 KHz (from step 2.6.3), set 34 to Regenerate-B (down; C10 no longer in series with regen. line). Set R4 to center. Perform steps 2.1.1 thru 2.1.5, If, when doing step 2.1.2, a peaked condition cannot be achieved, set SI one step clockwise (next-shortestantenna position), redo step 2.1.2 and proceed forth from that step.
- REGENERATING THE OUTPUT OF AN AMPLIFIED LOOP OR THE OUTPUT OF A PHASING UNIT (ACTIVE OR PASSIVE)
- 3.8.8 Active (=built in amplifier) Loop
- 3.6. Connect the loop initially to the receiver, peak desired frequency in normal manner with loop tuning capacitor. [Note that APT-2 isn't connected to anything yet.)
- 3.8.2 Position loop in usual manner to obtain null of "pests". Then, remove loop cable from receiver.
- 3.0.3 Set APT-2 SI to "long".
- 3.6.4 Connect loop output HISH (inner conductor of shielded cable from loop) to JZ of APT-2. Connect loop ground (cable shield) to J3 of APt-2.
- 3.6.5 Treat the loop output as if it were the signal from a wire. Perform part 1, starting at step 1.0.3.
- 3.6.6 Once the loop signal has been peaked through the APT-2 in the part ! "normal tuning" manner, ropeak the LODP tuning capacitor, if necessary. Then, if necessry, touch up the loop's physical null position.
- 3.8.7 Regenerate by executing part 2 procedures, starting at step 2.8.2. (In step 2.8.3, don't change the position of SI).
- 3.1.8 Phasing Unit
- 3.1.1 Connect the phasing unit to the receiver and execute customary phasing procedures. Then, remove the cable from the receiver's antenna inputs.
- 3.1.2 If the phaser is passive, set APT-2 Si to "normal"; if the phaser is active, set APT-2 Si to "long".
- 3.1.3 Connect coaxial cable from phasing unit output and ground to J2 (HIGH) and J3 (GND) of APT-2.
- 3.1.4 Treat the phaser output signal as if it were the signal from a direct wire serial connection: perform part 1, starting at step 1.8.3.
- 3.1.5 Regenerate by performing part 2, starting at step 2.8.2 (in step 2.8.3, don't change position of 61).
- USE OF APT-2 AS LOOPHEAD TUNER/AMPLIFIER

NOTES: [1] The term "loophead", for the purposes of this discussion, refers to the actual pickup coil part of a loop antenna system. (2) Two loopheads will probably by required for complete coverage of the 588 - 1788 KHz MW Band. Other heads may be fabricated for LW BC, 168 m, otc.

- 4.8.9 Preliminary Setup
- 4.8.1 Fabricate air-core or ferrite loopheads(s) to be used. These should be of a single-winding type with connections to be made at each end of the winding.
- 4.8.2 For each head, prepare a piece of RB174 cable of 2 foot maximum length. One end of the cable should be fitted with a BNC plug; the other end should have bared leads (shield and conter conductor).
- 4.8.3 On each head, solder the bared center conductor of a prepared cable to one lead of the loophead winding.
- 4.6.4 Solder a short insulated hookup wire jumper from the prepared-cable bared shield to the other lead of the loophead winding.
- 4.8.5 Connect the ENC plug of the cable (whose other end goes to the loophead) to J4, the external coil input Jack of the APT-2.
- 4.1.8 Normal Tuning of Loophead NOTE: Receiver should preferably be of a shielded type so that unwanted feedback/undesired oscillation may be avoided.
- 4.1.1 Do not connect anything to J1 or J2 of APT-2.
- 4.1.2 If the receiver is being operated on batteries or if a cable greater than 3 feet is to connect J5 or J6 to the receiver, a ground connection to J3 is desirable. The ground chosen may be an earth ground rod or pipe, a mains ground, or a vehicle chassis ground.

4.1.3 Set APT-2 controls initially as follows:

51 to 'long'

S2 to EXT. L (6 o'clock pointer position)

Cá to center (12 protock or 6 protock)

R2 to fully CCW (=maximum putput)

S4 to center (regeneration off)

53 to Power On (UP)

Position of R4 is irrelevant at this time

C5 is to be adjusted in next step

- 4.1.4 Connect receiver to JS or J6 of APT-2. Tweak C5 to obtain maximum signal at frequency of interest.
- 4.1.5 Position loophed for null of "pest" and/or peaking of a desired station.
- 4.2.8 Recenerative Tuning of Loophead
- 4.2.1 Perform steps 4.8.1 thru 4.1.5 as a prerequisite.
- 4.2.2 Perform these steps in the order indicated: 2.8.2, 2.8.4, 2.8.5, & 2.1.1
- 4.2.3 Adjust C5 for peak. If regeneration (squeating) breaks out, move R2 slightly CW until it stops.
- 4.2.4 Perform steps 2.1.3 thru 2.1.5.
- 4.2.5 If regeneration could not be achieved, set S4 to Renenerate-B (down) and re-Iterate steps 2.8.2, 2.8.5, 2.1.1, 4.2.3, & 4.2.4.

NOTE: Frequency coverage range with a given loophead may differ in the "normal-tune" mode from that noted in the "regenerative-tune" mode. Normal-mode range is generally greater as the parallel capacitance of the regeneration circuit is not switched in.

- LODPHEAD INDIRECT COUPLER
- 5.8.1 The loophead may be placed closer to a wire, pipe, or electrical conduit to which a direct connection cannot (and/or should not) be made. One example is the conduit going to the electic meter on the outside of a house. Of course, the loophead, in this application, will not have nulling capability.
- 5.8.2 Position loophead near coupling source.
- 5.8.3 Perform "normal tuning" steps 4.1.1 thru 4.1.4.
- 5.8.4 Hove loophead through various placements near the coupling source to maximize signal; then repeak C5.
- 5.8.5 Perform steps 5.8.2 to 5.8.4, then 4.2.2 to 4.2.5 if regeneration is desired.
- 8-5 .... The Atlanta Journal AND CONSTITUTION THURSDAY, NOVEMBER 24, 1983 ...... VIA HUTTON -EMD-

### If the microphones in his museum could talk.

MILWAUKEE - The enterophones in Bob Paquette's microphene mu-seum participated in some of the major historical ovents of the century, but always in a supporting role — always overshadowed by the figure standing behind

He has a small mike a CLA agent is said to have taken from the lockern at Hitler's bideamay at Berchtergaden.

And there's one like President Franklin D. Roosevelt used to warm a war-chilled zation in his fireside chaix

The big black bory one in the corner - that's a condenser microphone that traveled with Admiral Byrd on one of his Antaretic expeditions.

And over on the side is the kind that made the ladies awoon as it transmitted the sliky tones of Hing Crosby to a nation boddled around their radios.

Parente, "53" But been makes they who started counting them since the philing up the gadgets just 1950s and now has 105 -- "for her." Which he says is the largest collection in the country and probably in the world.

The Smithsonian Institu-

United Press International

BOB PAQUETTE: Owns 700 microphones.

tion knows about Paquetto. They're bettomed his scared me, it's always been microphones and sent mike a bobby for me."

onthunisats. his way. They's ' His interest started with think of a macher for a Mil
'gallon. As a fifth grader.

The Smithsonian refers a lot of people to me and that's surprising" be said.

red seeseene to me it

Parcette best a path to the netahborhood library, read-ing every book available on the talking machines.

Later be got a fob with an electronics pempara "The first time they refer- and eventually started Se-

lect Sound Service Inc., phone. Paquetic says he is suit able to find more. The

Parpotte's misseum is journalists were busy chronisting the historical med with shelves and events—not the history of places of microsphores of lined with shalves and shelves of microphones of All shapes and sizes. Most are American, al-

though he has some from Germany and England. Many are branded with the call letters of broadcast stailors throughout the country, some now defunct. His fale cabinet is filled

with copies of pages frem; weeked on the area." old periodicals that show pictures or advertise miles.

There are also books like "The Speaking Telephone. Talking Phonograph and other neverties," dated 1878.

He has some netwurk microphoses and microphones from motion picture doubt have felt the signs of the famous. But they cannot talk, and their pasts

"I know a lot of these miles have been used by a lot of top people. A lot of them are NBC miles," he said. "But how do you ever verily who used them!"

he's gathered on the micro-

the transmitter.

"What I've Goot through the general, to read all the original periodicals on the stuff and booked up with all the people and talked to them," Paquette said. "It's

amazing how little they

lot of the old-timers only

The basis for this article is actually quite old. I did a paper on the feasibility of a conversion to AM stereo when I was putting in time at CKEY-598 in late 1978. I don't know why I didn't adopt it at that time for DXN.

At that time the FCC was still up in the air on which way to go. There were five systems in competition at that time:

Belar - AWFM Magnavox - AM/PM Harris - CPM Motorola - COUMM Kahn - ISB

Since Belar has dropped out of the picture, this article covers the other four. The actual realizations for the various systems may have been updated in the past five years, but as far as I know no major changes in concept have The following descriptions do not get too specific so that the material is still quite valid.

A number of features are common to all four systems. Each of the systems

had Its own atrengths and weaknesses, as I shall try to point out.

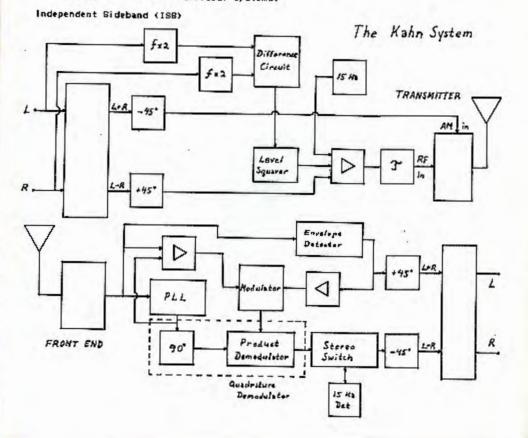
Common to all systems is the feature of matrixing. One of the initial criteria of an AM storeo system is that it must be compatible with existing AM radios on the market. In order to make a meaningful signal then, the left and right channels are summed together (L + R) and this is transmitted so that a conventional radio will receive a useable signal. The difference signal (L -R) is imposed on the transmitter in some other form to provide enough information that a receiver at the other end can once again separate the L and R signals.

in all designs the two matrixed channels go very different routes to the transmitter. This establishes a need for time correction networks to bring the L+R and L-R signals to a common time base. The time correction, which may or may not be explicitly illustrated on the block diagrams of the respective systems, restores something of the original stereo separation.

The systems all have some form of storeo indication information for the receiver. Tones varying from 5 to 25 Hz are inserted on the stereo (L-R) information and these tones are decoded at the receiver end to turn on a stereo

indicator light and/or automatically switch the radio into stereo mode.

Let us turn to the individual systems:



Kahn Communications of Freeport N.Y. has been actively involved in the field of AM stereo since the late fiftles (no kidding !!!) so the ISB system is the granddaddy of AM stereo.

To start with, (reference to diagrams) the L and R channels are matrixed to provide L+R and L-R. After the monaural (L+R) signal is phase-shifted -45 degrees it is applied as amplitude modulation for conventional receivers. The stereo path splits - one path is phase-shifted +45 degrees and sent to a summing amplifier. The other path is put through a frequency doubler and restored to the same time base as the first one before it too reaches the summing amolifier. The frequency doubling results in a dramatic increase in stereo separation, according to Kahn. This modified L-R conversion is sent to a phase modulator and impressed on the carrier at that point.

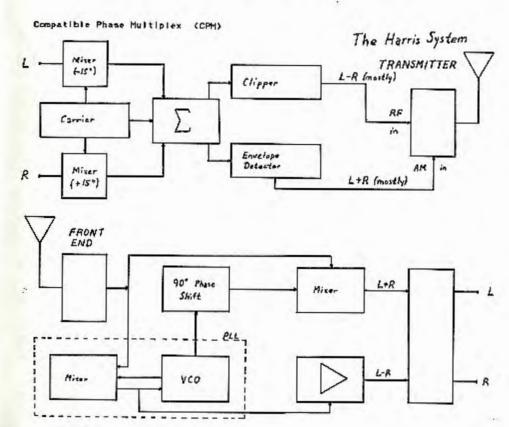
The advantage of this system is that the resulting pair of independent sidebands may be monitored by anyone with two monaural radios. (It was your Muse, erroneous, of Vol. 51 #3, Paul Swearingen, that put me onto the article in the first place ... ) The left channel can be monitored by tuning below centre frequency and the right channel by slightly above centre frequency.

The AM stereo receiver as proposed by Kahn is conventional from the front end through the IF stages. The monaural (L+R) signal is demodulated conventionally with an envelope detector and provided to the audio matrix. The stereo (L-R) signal is put through a phase locked loop and a quadrature demodulator before the product detector provides a useable L-R output to the audio matrix. Kahn uses a 15 Hz tone decoder to provide any stereo switching desired.

The primary difficulty inherent in this implementation stems from the numerous phase shift circuits, but a multiple IF stage design is conceivable

with somewhat less phase manipulation.

The Kahn system is unique in providing independent sidebands. It has been claimed that the ISB system is relatively insensitive to ionospheric distortion, which theoretically makes it more DXable (are there any bodies out there who can substantiate this..???) and Kahn claims a relative insensitivity to full negative peak modulation, which allows those T-48 station to drive their transmitters hard and not splash onto neighbouring channels.... theoretically.



The Harris Corporation of Duincy Illinois has implemented a system it calls compatible phase multiplex. Instead of using a distinct audio matrix, the L signal is modulated onto a carrier which lags the reference by 15 degrees and the R signal modulates a carrier which leads the reference by the same amount. The linear sum of all three, including the unshifted reference is said to provide something approaching a coherent L-R signal and reduced L-R signal quadrature signal. A stereo identification tone of 28 - 25 Hz is inserted onto the L-R signal at this point. When I look at the vagueness of this description I don't wonder that Harris has been experiencing some distortion problems, as far as the FCC is concerned. I must confess, I have never sat down and taken a good look at the math behind the system.

This is a modified quadrature system, similar to techniques used to transmit two chroma signal on a subcarrier in a television signal. A conventional AM transmitter cannot handle CPM in the form, and the signal must be separated into its envelope and phase-modulated carrier components. These

are then fed to the transmitter.

Receiver design is once again quite conventional until after the IF stages. The IF output is sent on the one hand to a phase locked loop consisting of a balanced mixer and a voltage controlled oscillator. The output of the PLL is sent to storeo tone identification circuits and to the audio matrix. Another output of the PLL is phase—shifted +98 degrees and added to another signal coming directly from the IF stages. This L+R signal provides the other input for the audio matrix.

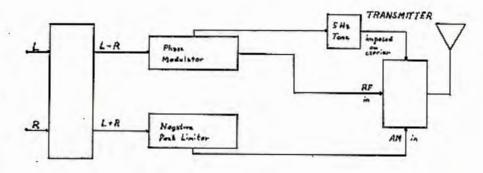
Harris has placed an emphasis on compatibility and monaural algorate quality. It has also been illustrated (by Harris) that the Harris system provides the least increase in spectrum width over a conventional signal. As it stands now, I believe the Harris system is the most popular in terms of the

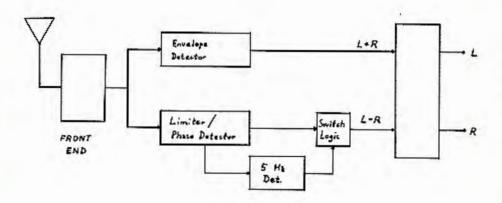
number of stations employing it. Correct me if I'm wrong.

#### AHVIM

Magnavox of Ft. Wayne Indiana came up with the system whereby the carrier is phase-modulated with the stereo (L-R) information and then amplitude modulated by the monaural (L+R) signal.

The Magnavox System





Firstly the L and R signals are matrixed to produce the requisite L+R and L-R signals. The storeo signal is time delayed and enters a phase modulator which imposes variations to a maximum of one radian (approximately 57 degrees) on the carrier. This signal is then modulated by the monaural signal.

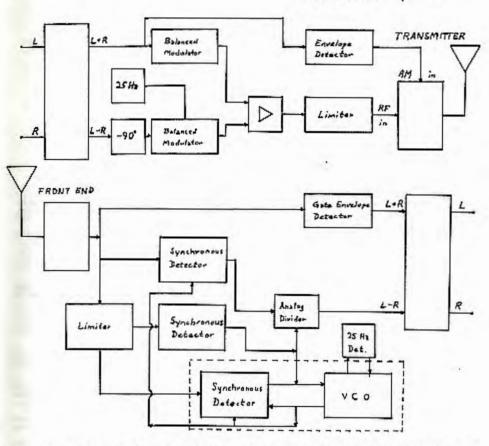
After a conventional front end and IF stages, the signal is sent to two destinations. The monaural information is detected conventionally in an envelope detector. The stereo signal is ilmited and demodulated in a phase detector. Part of this is used for the 5 Hz stereo signal detector and the other portion is tailored for the audio matrix after having passed the stereo switching circuitry.

As is fairly apparent Magnauox has emphasized the simplicity of implementation of the system. There is a problem with peaks of 188% negative modulation.

This was the system which the FCC decided on as the standard for the industry until the industry raised such a how! that the FCC relented and threw the market wide open.

C-QUAM

The Motorola System



Compatible quadrature amplitude modulation, as introduced by Motorola is a modified quadrature system also.

A straight quadrature system would, say, modulate the left channel 98 degrees ahead of the right. This would of course, not provide the necessary L+R compatibility to conventional monaural receiving systems. The modified quadrature system matrixes the L and R channels. The stereo signal is delayed by 98 degrees and summed to the monaural signal. The hard limiter produces a phase modulation and this is applied to the VCO of the transmitter, while the L+R provides the conventional amplitude modulation.

The decoding circuitry in the receiver is relatively complex. Naturally, up to the output of the IF stages, the receiver is of conventional design. A gated envelope detector provides the L+R signal to the matrix. Two synchronous detectors and an analog divider yield the L-R signal which is fed to the matrix also. The PLL and the 25 Hz detector extract the pilot tone which can once

Although the receiver is complex, the quadrature system does have some noise advantages over its competitors. And te complexity of the receiver, and approach to AM stereo in general throws the responsibility of fidelity squarely onto the shoulders of the receivers, which might not be a bad thing in the long

Of course, now that the Japanese so wisely have brought out systems to receive all four of he competing methods of transmission, the need to choose a single system is made obsolete. For the average consumer it makes little or no difference as to which system is employed by the station which he or she listens to. For us within the DX faternity, the matter is not quite so clear cut, as the recent controversy with Harris points out.

Arnim Littek

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----BUITTHIT COLUMBIA

2 Leads From The 30's 7



### WGY, WGFM moves unusual

VIA EEC

HEE! READABLEMY IS NOT PRACE

Martin Moynihan

a the eneventional wisdom of radio broadtristing, mater stations WGYAM, and"
WGPM-FM are doing some unconsensional

Taking a job in a radio disc jeckey edica jesolves and employment is trailed south of the life a very ling to the life of the life good.

The life bornes is the middle of the stream.

Shortly after new comprehen took over the two stallow from General Edectic Brandonting Co. the sey 49 Feb cutted first first property dec Jockey and seatched time slots for two values.

What the radio community is begann about — and also notice shall members about petvaloly has them after the light the sunject changes have come long the mentament, 15 week Whitey threety The communication whiches held and change is fertically also the light of them.

The property of the property o

J.W. Wagnet, former middlef-declary, who to the post year was transferred to weekend and production work, quit to take his old job as program director at WFTB. One prason, he said, was "a case of the known see the afficience,"

He may not be alone. According to one above pipe asked not to be identified "every hear it pending to look over their shoulders."

Michael Nell, program director at WGFM. doesn't ace it that way at all. "What we've done is simply a misea gement dermide we'd make personal was a stating person or ...

not. The old scare really doesn't apply asympre.

not. The old adapt really doesn't hoply asymmetric old days, rating periods are four week; which periods less, for earlier less that are less than a card let the series of the less than a card let the series of the period dictate policy," he said.

"The origin on air person fired at WCFM was series that him it wanted more multi-and entered hald him it wanted more multi-and less than the moreing when it let him go. "The letter has been a more of the limit of the moreing when it let him go." The letter has been a more of the limit of the more management to management to the letter of the letter has been also be

The reaction to blitchell's thought." about the trate, and the people don't advertise their salaries, the traver of its issuices are generally regarded as the large of the traver of the trainies are generally regarded as the large of the travers tay john in the market.

a nother ratings period switch, evernight reality Leep Haint James, and nightime your John Daniels switched time slots. In all, and the Phi station's time are shifts have been and by the new management.

The started place person change in the Compose other shoes to strop. Netl sees stability or will M. Talk show seet Operage, Netl says, is

he recent ad for a person during his time slot The just testing the water to see what's out there il was a way to bet our care travel across the country. But we have assured Bob Codmore his position is safe here," Neff added.

But lesiders remain a little useasy, particularly to the wake of the peremptory dismissal of

"Mitchell," according to a radio insider, "was the only one allowed to radio the listeners feethers, tout is, have a personality on a mostly prosie station."

The money may well have been the Issue, The smaller Say Corp. "just can't pay that kind of money" in the mid-100,000 range for a Mitchell. and at least another \$15,000 on top of that for WGV morning personality Don Wooks.

As a result of sales by big conglomerates all bets are of once again.

(General Electric selling WGY-WGFM, Capital Cities Communications selling WROW AM and FM to smaller media chains), "You'll find Jose (promotional) advertising by the bigger stations, and news departments will strink," a local station manager said

"I think you'll find find people (deejays) not jumping from station to station as much, because pay scales will be all sectly much the same. There will be little reason to jump, except for higher calings, maybe for a chance to get more

The people who bought bought WHOW from Fortune 500 company Capital Cities own just two other stations, in Poughl repair.

Scott Commentations, which owas a hapdful of AM-FM combinations outside the market, is dest the higgest broadcasting charts in the Capital District, though Sky is a subsidiary of a company that owns i Datations.

"So really the stations in this market are now owned by a lot of small corporations. And that's what you are going to run into," the station

"A lot of corporate dollars we formerly had here are going to be missing. The more talented amounters are going to be passing through the arts faster, the Capital Destrict will become a stepping stone more than ever before," he said.

At the eye of the hurricase II is gelet, Dudmore says be feels reasonably secure from his company's assurances all it well

"I appreciate the support I've been getting form folks, letters, etc. The ad has come upon the show," Dudmore said.

Cudmore said the rating for his "Contact Show was 11.9 (the percent share of the metro through, roughly the same as the last couple of gating books. That was good for a No. 2 rating overall on the top ranked adult station.

"WGY is a great radio station, I'm interested in staying as long as I can." Codmore said. WGY is bopeful of continuing to be the dominant station in the marketplace. \*but it is a period of transition to new ownership, and the set is a little unsetting. They are looking for a nighttime talk show host, and that's what I do."

The current rating period ends Dec. 14. Then,

### DUSTY DIALS

TOM FARMERIE 62 SUNRISE AVENUE GRAFTON, MA 01519

As promised, here is the first edition of a seni-regular column that will continue documenting the histories of BCB Dxing and NRC. The HRC 50th Anniversary Book was just the tip of the iceberg, so to speak.

First off, I have some minor corrections to the NRC Club History feature in the book. Kernit Geary sent these along: CPC Chairman for 1947 - 1948 was Lon Kruse, in the original slate of club officers C. G. Ruber's title was Advisory Chairman, official NRC MQ was Buffalo H. Y. from October 1940 thru August 21. 1965 even though publishers were located in North Girard, Croton, Amarillo, and Kittanning. Thanks, Kermit!

After the book went to press, I discovered a complete Identification list of the members in the 1939 NRC Convention photo. The list follows:

LEFT TO RIGHT BACK ROW: Elmor Wokaty, Ray Edge, Stephen Mann, Robert Breymaier, Max Demuling, Harry Gordon, Tom Carberry, Jack Siringer, John Kalabach, Bill Stone, Hans Jacobson, Fred Herritt, Herlin Steen, Francis Ribble, H. E. Herman.

SECOND ROW STANDING LEFT TO RIGHT: Grant Butson, Tony Evangelists, Ed Felchtnor (behind Tony), Pat Reilley, Nrs. Joseph Schopneyer (Joe Becker's daughter).

BEHIND HRC SIGH: Leo Herz, Hort Mochan, Fred Alfred, (standing) Bob Botzum, Curtis Dockweiler, William D. Stine, Dick Cooper.

SITTING LEFT TO RIGHT: Joseph Shopmeyer, (front) Harry Sanda, Joe Becker, Francis Gneiner.

SITTING NEXT TO SIGH RIGHT SIDE: Wick Evengelists, Herbert Burstron, Al Bartholomew, Harold Burstrom.

Based on my research, some ages at time of this photo were: Dick Cooper 25, Ray Edge 39, Pat Reilley 45, Joe Becker 52. Nobody in this picture is still a member, and I know of only two that are still alive.

Good friend Bill Bailey told me of a charming practice in the early days of DXing. This was faithfully practiced by both BCB DXers and anatours. What they did was "polish their antennas", going up on the roof or wherever and using copper polish or whatever to polish the ol' skywire. Haven't tried it yet myself1!!

The beverage antenna has been around for over 60 years. Today's Diers are increasingly using it to combat the gallimaufric congestion of the band. Back in 1937. later-on club president, Harry Gordon (a.k.a. "Hr. Up Faul Knight"). mused on his spectacular set up of long wire antennae. While not long enough to properly be called beverages, they were, along with his super-quiet rural location able to haul in great DX:

Report by Harry M. Gordon in "DX MEMS", January 20, 1937;

HARRY M. GORDON, Eric. PA. - Here's the dope on my experiments with Acrials. The East Aerial is 700 ft long, tapped at the east and. The West Aerial is 1000 It long, tapped at the west end. South Aerial is 600 ft tapped at the south end. North Acrial is 600 ft tapped at the north end. They are all 100 ft high. using No. 12 solid copper wire-enemeled, with one aerial 100 ft long vertical, We have switches at the set so that we can use the directions that we want. In our past experiments we have found ORM on different frequencies, but by changing directions we can clear this QRM up, that's providing that the stations that causing the QHH are in different directions. Example: on BOO kes at 10:30 A.H. we tuned in WTBO and could hear a station in the background, and by changing our Aerials we could log WFAA in Texas. Our East Aerial would place WTBO at an R9 signal and our South Acrial would give us an R6-7 signal, and would place WTBO onough in the background so that we could log WFAA with ease. At noon we logged WBAP by using our South Aerial. This applies to Cuban stations also. A little more on the WTBO and WFAA and WBAP experiment; by using our West Aerial our signal on WTBO would drop to an R5 and on WFAA and WBAP the signal would drop to an R3. Here's a list of atations heard on January 17: KXA 760 kc R8, KGHB 1320 R6-7, KEHE 780 R8, KGU 750 R5-6, RFWB 950 R6-7, KFVD 1000 R5-6, KWJJ 1040 R7-8, KJBS 1070 R7-8 after CMBX signed off, KIRO 710 R7-8, KYA 1230 R6-7, Fecamp 1113 after 3 A.M. with their English program R6-7, and 17A 650 R5-6. This station puts in the best signal on the West and South Aerials by using the two aerials together, giving us a large increase, although we can get them on the West Agrials. We are using a 3-stage preselector, using 135 volts on the "B" Battery and a 6-volt "A". The preselector gives us a great increase in signal and nore selectivity. Using a Philos Battery Set Model 34, 7 tubes, all-wave, with ground made off a water pump that is 25 ft deep. No power lines and telephone lines within 2 1/2 miles of the house.

The late great Joe Backer has few poors as a DXer. He was simultaneously the most beloved member in his day. Joe dropped out of the club around 1951. having given up DXing for health reasons. I managed to contact one of his children after the book went to press. Joe lived to the ripe old age of 85. passing away suddenly in 1972 while doing a crossword puzzle. Just one of his veries remains, and I obtained a copy of it. It was his most prized of all, from TJW Hamilton Bermuda only 7 1/2 wattn! It will run spon in this column.

See you again soon with another edition. Send comments and suggestions on future topics you'd like to see appear.

46 San Frangies Chredirte /2/12/.

### GERMALD MACHMAN

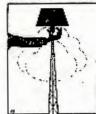
### All Out of Air

hon Geery Gordon turns out the light after signing off at KSFO one last time tonight, several listeners plan to bury their radios.

Gordon, who won't be returning when the station resumes under new ownership, was one of a dozen lifelong KSFOers who gathered Friday at Perry's for the fifth fast supper that week. Gordon, who looks less like a DJ than a liel's Angel, a big, hearded guy wearing an Ivory tooth necklace, joked about working for a motorcyle magazine.

To his right was Buddy Hatton, who has been asked back Hatton, like others at KSPO Ulm Lange, Larry Ickes, Bob Holmes), has one of thoso

chuckly KSFO voices that tells you where you are on the dial.



Across from Hatton sat program direc-tor Alan Hotlen, who won't be back and was out chuckling. "It finally hit me today," anki Hotlen, Douching into his seas. "I'm feellog terrible, but the day Sherwood dard

At the other end of the table, next to host Perry Butler, sat beely news director Jeff Scov, he of the booming voice, a definite Sound of the City who has never worked anywhere else, Further down sal Bob Textera, legendary longume engineer. They're all out, after 20 or 30 years, along with newsman Aaron Edwards, who has seen 'em come and go but never thought be'd watch himself go.

t was a genial wake — not drunken, maudlin or joily, just a bunch of colleagues having one last lunch. Perry Butler stood up and said bow, when he moved here in 1968, he tuned in 560, and "I've never had any reason to change the dial."

No one knows what will happen when King takes over, "Beats me," said Hatton. "Someone came up to me and said 'I'm your new producer' and I said 'Glad to know ya!' It's a big mystery."

One rumor is that KSPO-II will be much more talk and less music, a shotgun wedding of Nell-Diamond and Mel Torme.

Apparently, the new policy will forbid playing anyone who's dead or lan't still recording. so Streisand and Sinatra will survive but Mercer and Garland have had it, at least in this city. This also will finish Fats Walter and Hoagy Carmichael; tough luck, guys. Billie Holliday will have to shill for herself or make the Top 40.

All is not lost, for Dan Sorkin is coming back, along with Gene Nelson, Carter B. Smith and Russ Syracuse, who passed their demographic tests.

The new owners have relied on the sage council of Magid Associates, the revered media medicine men responsible for making a joke of local TV news; they also fiddle with radio formats. Stations pay them great sums of money to do this.

Hotlen, a veteran of several "broadcast markers" (often called cities) said, "I've never heen at a station that was so much a part of a city. Has anyone brard a word about KYA?" Nobody had.

he listeners are not sad, or nostalgic, just mad as hell. A cab driver told Hatton that on Tuesday he switches stations forever. A woman wrote: "I cried when Gene Nelson left and I'm crying worse that be's coming back."

Yet because KSFO isn't technically going anywhere, just being dismonifol, the on air personalities who are leaving - Jim Lange, primarily have been denied departure with dignity.

Their farewell has been muted - mostly onair innuendoes and gentle joshing, but not the sort of bitter Goodbye to All that a great teadition deserves. They've had to be good sports.

The DJs can't say what they feel, it seems, because King has bought the call letters and the good will that goes with it. Tomorrow, all that good will, to devoted KSFO listeners, will be worth about 72 cents.

It's like someone has crone in and, overnight.



#### KKAR PLANS MID-1984 START

### L.A. Area Set For New All-News Daytimer

The News/Talk fray in Los equivalent of a signal "in excess Angeles will become more com-plex next year when a new all-News station begins broadcasting on 540 kHz from nearby Hesperia. The FCC has lasted a construction permit for a tiew daytimer on the Mexican clear channel to the sole applicant, KKGO/Les Angeles owner Saul Levine, who expects to be on the air in mid-1984.

Levine told It&It the station will target Southern California commuters. He has applied for the call letters KKAR and plans to use the slogan "RKAR 54." playing on memories of the 1960s television show "Car 54, Where Are You!" He expects to affiliate with CNN Itadio and use the ID Hesperia-Los Angeles

Levine feels the station could reach an estimated ten million potential listeners, covering all of Orange County and large portions of Los Angeles, San Bernardino, and Hiverside Counties, Owing to greater groundwave conductivity at lower frequencies, Levine contonds KKAR will have the of Solow."

Levine, who first thought of applying for the channel 16 years ago, is convinced there's room for another all-News station in the market and adds, "We have faith in AM." Although all-News KNX covers most of KKAR's new territory, he believes "KKAR 54" will serve many areas sot reached by two other News or Talk competitors, KFWB and KABC.

He continued, "I'm not at all unhappy that we have no nighttime authority. It all starts to go over to television in the late afternoon. You can probably shoot a most News/Talk stations at right." He expects EKAR to operate from fam to at least 7pm.

Lerine now uses CNN Radio on XSHO/Headule continuously from 5-Ham and then hourly for the rest of the day, "It seems lobe working beautifully at MSMO, I just think it's a sensational procuci," he commented.

By William Marvin

The following article is about aligning the HQ-188's IF stages without the use of external signal generators. Also this article was written with the non-technical person in mind who has the desire to keep his or her HQ-188 in top performance for years to come. As one progresses with the alignment steps which follow, I hope that this article will give the owner a chance to feel a sense of accomplishment and best of all the satisfaction of knowing the 188 is alloned for optimum performance.

The idea behind this article was started when I purchased a very nice HO-188AC at a local hamfest. Upon bringing my find home and plugging it into the power source, it was apparent to me the 188 needed some tubes replaced and an IF alignment. The tubes were no problem, but IF alignment was a different

story.

Being a electronic student at a local technical institute, I had access to some very sophisticated alignment equipment. The alignment almost proved as useless as the alignment instructions. Both were very time consuming and awkward to use. Who among us has the test equipment required, the patients of a saint and the arms of an octopus? Not ! !!!

The first criteria on improving the alignment procedure was to exclude signal generators and voltmeters. Secondly, I wanted to omit the practice of hooking up test equipment to the circuitry located underneath the chassis. Third and most important, to make the alignment take as little time as possible and use few tools.

An Idea struck me between the eyes ... Why not use the HQ-188's internal crystal calibrator as an artificial signal source and the 5-meter as an output indicator.

All that is required is to tune the artificial signal through the many IF transformers for 'maximum' on the S-meter. Of course, it is important to Know

the many receiver knob settings.

Some lucky HQ-188 owners will find that they will not have to take the receiver out of its cabinet. The reason for this is that on some late model HQ-188's the 455 kHz transformers have tuning slugs that one can adjust both the top and bottom slugs from the top side of the receiver. My particular HQ-188 had to be taken out of its cabinet because the tuning slugs in the 455 kHz transformers have slot type tuning slugs, like a flat head screw, thus making adjustment of upper and lower slugs impossible to get at from only the top. To determine if you will have to remove your receiver from its cabinet take a light and shine it over the three 455 kHz IF transformers, (find on chart). If the 455 kHz IF tuning slugs have holes in the center to accompdate a plastic hex wrench then alignment can be made from the top for both upper and lower slugs. If the 453 KHz IF slugs have slots to accomodate a plastic screw driver then removal from the cabinet is a must, but most will find it quite PASY to do so.

The alignment tools required are a small plastic hex alignment wrench that is commonly used on small TV transformers and a small plastic screwdriver both

can be purchased from a radio and TV service shop.

So...all you fellow HQ-186 owner's get your 188 off the shelf or out of the closet and align its IF stages better than Mr. Hammarland could have dreamed. But please don't blame me if you experience increased selectivity and sensitivity on the BCB OX'ing.

Believe me anyone can do this alignment quickly and quite painlessly on their HO-188. Don't let the numerous steps bother you, they are quite simple. I have included a transformer location diagram to aid those who do not have the

HD-188 instruction booklet.... Have fun and GDOD LUCK !!

#### HG-188 ALIGNMENT STEPS

- 1. Remove the 188 from its cabinet. (optional)
- 2. Lay the radio on its side with the power transformer nearest the table too.
- 3. Turn the power on and let the 188 warm-up for about a half hour.
- 4. Set ALL panel knobs as follows. (Initially)

POSITION Band Selector 7.85 - 15.35 MHz Band Bandspread Dial 189 AM-SSB-CW AM(Hode) Sideband Both Selectivity 2 KHz Slot Frequency 9 o'clock BFO Control B OFF Noise Limiter AUC. FAST

PANEL KNOB

Antenna Send-Receive-Cal Audio & RF Gain Venier Tuning POSITION
Maximum Signal
CAL
AS NEEDED
8 KHz (12 o'clock)

- 5. Attach an antenna, speaker or headphones.
- 6. Tune in WW on 16 or 15 MHz for maximum S-meter reading.
- 7. Locate crystal calibrator trim capacitor (see location chart) near tube VII on the top side of the chassis to zero beat the calibration signal with that of WMV.
- 8. Set the Selectivity switch to .5 KHz position, sideband switch to U, Band Selector switch to .54 1.85 MHz.
- 9. Disconnect the antenna.
- 18. Tune in the calibrators signal a I MHz (1.8) for maximum signal indication on the S-meter. NDTE: As alignment proceeds keep the calibrators signal at half scale on the S-meter by adjusting the RF gain control, this insures maximum sensitivity.
- 11. Locate the 68 KHz IF transformers T6, T7, T8, T9, T18, and T11 on the location chart. Adjust the core slugs starting with T6 through T11 from the top side for maximum signal indication on the S-meter. This completes the 68 KHz IF transformers... wasn't that pasy?
- 12. Turn the mode switch from AM to CM position.
- 13. Set the BFO control exactly on '8' KHz.
- 14. Locate T28 on location chart. Turn T28's sing for zero beat (no tone) in speaker or headphone.
- 15. Turn mode switch to SSB from CW position.
- Switch the selectivity to 3\_KHz from .5 KHz and put the sideband switch to Both from 'U' position.
- 17, Set the Venier Tuning control to the 12 o'clock position.
- 18. Locate and zero beat a stations carrier on 798 KHz or 1586 KHz with the Main Tuning dial. Find the location of L4 on the location chart. This transformer, L4, is for adjusting the 395 KHz oscillator. When adjusted exactly the 395 KHz oscillator will produce a beat tone or hetrodyne at 798 KHz and 1588 KHz. Once the 798 or 1588 KHz stations carrier is zero beated by adjusting the main tuning dial, turn L4's slug so that the oscillators signal is zero beated with the stations carrier, for maximum background noise, on either of the two frequencies chosen. NOTE: L4's adjustment will also affect dial calibration.
- 19. Turn mode switch to AM from SSB .
- 28. Locate crystal calibrators signal at 1 MHz (1.8) on main tuning dial. Peak signal on the S-meter.
- 21. Locate 455 KHz IF transformers T3, T4, T5, and T1. Adjust both toe and bottom slugs of T3, T4, T5, and only the TOP SLUG of T1 for maximum reading on the 5-Meter.
- 22. Turn bandswitch to 7.85-15.35 MHz band and tune in the calibrators signal anywhere on this band.
- 23. Find the 3835 KHz transformers T1 and T2 on the location chart. Adjust the <u>bottom</u> slug of T1 and the single slug in T2 for maximum reading on the 5-Heter. NOTE: When adjusting T2 it is a little difficult to get at from the top due to the Slot Frequency Assembly above it. Also T2 has very broad tuning, peak so adjustment isn't critical.
- 24. Turn power off and return the 168 to its cabinet. (optional)
- 25. Find Slot Frequency Assembly located behind the upper right of the front panel. Turn power back on and let the 188 warm-up for about 18 minutes.
- 26. Turn bandswitch to .54 1.85 KHz and locate the calibrators signal anywhere on this band and peak it on the S-meter.
- 27. Turn the Slot Frequency control on the front panel to the 12 o'clock

position. (B KHz) Adjust L3 located behind the front panel with the plastic hex wrench for minimum on the S-Meter, be careful, it is easy to miss the exact null point, so take it slow. When maximum null is reached turn the depth control for further reduction of the S-Meter signal. It may be necessary to go back and forth till no further minimum can be achieved on the S-Meter.

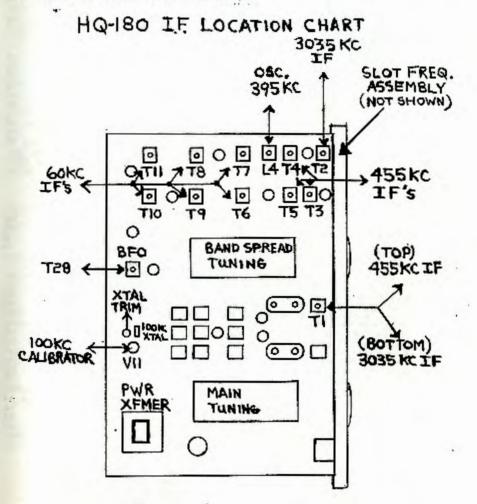
28. Return the Slot Frequency control back to the 9 o'clock position and turn the crystal calibrator off. Hook-up your favorite antenna and get ready to do some top notch DX'ing.

#### ADDITIONAL COMMENTS:

Congratulations for a job well done !! I hope you didn't have any problems. If a problem does arrise feel free to call me in the evening at 1-715-394-5758, ND COLLECT CALLS, ask for BILL. Also I would like to mention and thank DICK TRUAX for inspiring me to write this article, testing the alignment on his HQ-18B and for re-writing many parts of the instructions that needed re-working. Again thanks Dick.

#### REFERENCES:

\* = Lankford, Dallas. A BCB DX'ers Review of Hammarlund HQ-186 Series Receivers. NRC REPRINT RR-18 (oct. 77) p.4



PAUL SWEARINGEN 7310 ENSIGN AVENUE SUN VALLEY, CA 91352

The opinions expressed in this column are those of the individual members, and do not necessarily reflect those of the editors, publishers or NRC.

Welcome back ... after a week's vacation. I hope that Santa stuffed your stocking with the appropriate DX goodies. Deadline for the Jan. 23 issue (\$15) is Jan. 7, and the \$16 issue's doadline is Jan. 14. Remember that we'll be highlighting first-time Musers' contributions in the \$16 issue. Now, here, we go with a record-breaking column ...

Mike Reid - 109 Arjay Cres. - Willowdale, ON M2L 1C6 (pm 11-27; rec'd 12-1) I'd like to start off my last Muse by mentioning that I would like to have been at the convention this year but the ol' funds were getting a bit low. Even with the WTFDA convention being my cheapest ever. A record that will be broken by ANARC next year. I did send a form to Ron and a letter later on to pull out. The loss was lessened by the fact that I saw Vermont for the first time on TV in my career which started in 1962, although continuous from only 1978. This happened 9-4. I feel that ELT should be the standard time for Musings. There should be one standard. Back when IRCA used EST all year, I kept my "DX clock" on EST and had no trouble with conversions. I should explain that my departure from this club has nothing to do with the so-called "worse conditions" present today. Nor is it due to the fact I DX PM. Instead, MW DX simply lost its appeal, something that happened in 1972 also. Back then I thought I was out for good. This time, I'm not being so definite. I returned in '79. When I read the article on the Golden Age, somehow I could hear violing playing in the background. It seems every ten years or so, someone is saying how great things were 10 years bevore. Yet, if you took back, you'd find poople complaining about the earlier time. Despite the changes, this hobby does continue to attract new people anyway. In my own case, I had a better time in the '79 to '81 period than the '67 to '72 poriod. It is true I was learning about the hobby in the earlier time, but in the more recent time, I almost doubled my totals (now over 888) from earlier. That first batch (around 432) included locals and posts. Almost all of my most memorable catches date from the more recent period. Some would consider these numbers small, but I consider what I got in the past few years (380a; too many to list here) to be an indication of what can be done today. There's plenty out there, folks. Now, about OSL'ing: I don't consider the amount of OSL'ing I do to be a measure of the seriousness of my DX activity. I've QSL'ed during light periods and not done it during heavy ones. I have taped on many occasions, though. In my TV career, I have not QSL'ed, taped , or photographed some of my best catches, yet I don't consider my DX there to not be serious. Getting the signal is the main

report from Gary Hill, CE of KTGR-1588. Maybe a CPC possibility? 73's.

Bill Hardy - 2301 Pacific Ave. - Aberdeen, WA 98528 (pm 11-29; rec'd 12-1)

idea to me. By the way, I once got a friendly negative reply to a tentative

A strong windstorm on Sat. 11-19 toppled one of the two towers at local NSP'er KXRO-1320. They stayed on the air that night and 11-20, using 1 kw mondirectional. But the FCC ordered them to leave the air at sunset 1-21 (4:45 pm PST) and stay off till sunrise 11-22, 7:15 am. They went off again from 4:45-5:38 pm 11-22 while they retooled the 1 kw night mode to reduce power to protect CHQM, which is ridiculous because CHQM is supposed to protect KXRO but has not since 1976! A new tower arrived 11-22, and the 1 kw-DA-N is supposed to be back in service by the time you read this. After the 11-19 storm, weather improved for two days and we spent Sun. 11-20 at Ocean City State Park again. Storm fronts ovidently weakened conditions to the east and north, so the best DX came from points south to southeast, such as western Oregon, California, ans such. Two new loggings that evening, KMJJ-1146 Nevada 4:19 pm PST, atop KRAK with an ID in the "Countdown America" show, and much-wanted KSDO-1130 San Diego, fairly good in CKWX null, "KSDO News Update" by YL 6:59 pm between NBC Talknet and CBS News, including Charger football plug and jingle ID. Also noted unn KUIK-1360 on fulltime, as mentioned last Musing. Mon 11-21: Still camping: 8:03-8:14 am KRVC-736 excellent, Oregon news by YL, local ads, several ID's into Contemporary Christian mx. 8:35-8:55 am and beyond, KZZI-1510 Utah good to poor, very little KGA, Spanish ranchera mx, definite "Kah-zeta-zeta-see" 8:51 1/2 am. Had to sit on KBCH-1408 10:15-10:33 am to get a positive ID. Good signal, lots of standards and nostalgia mx, talkative "old" man DJ to match, lots of local ads, mentions of the ocean, tides, Oregon coast, etc. Finally 10:33 nm KSCH sales manager promoted advertising on KSCH. Interestingly, KIVR near the California border was in quite late that morning along with KBCH. Set on 1518 again 10:45 am-12-15 pm, hoping for an ID from KKNW, one of my closest unheards, but no luck. Lots of rock music back-to-back, on "Magic 15" mention, but fair to poor signal usually under KGA! So we headed home. 73 and good DX.

#### WHTH am WNKO fm

STUDIO AND TRANSMITTER
LOGATED AT
1000 NORTH 40TH STREET
NEWARK, ONE 43055



John R. Halicky - 995 Shadycrest Rd. - Pittsburgh, PA 15216 Happy New Year! Is it really 1984? I hope it will be a great year for everyone and for the NRC. Now to November's DX highlights. Any new stn is underlined. On the 6th, 2 stations on 1220 snuck through WGAR, WENG Whiteville, NC signing off at 5 pm BST and WAXO-Lewisburg, TN with s/off at 5:47 pm. Also on 1659, WTSJ-Cincinnati "The Sounds of Joy" left the air at 5:31 pm; and a v/1 from Chris Roberts who enjoyed my letter and thought I wrote the s/off down real fast, but I should have mentioned I used a tape recorder. He also mentions that ha is an AM DX'er; I guess I should get him to join, right, Paul? (Yep; every CE a potential Muser, hi -pls) A word of warning - always have your tape player ready - I didn't for just this one time and missed the s/off of WKBY-1888 in Chatham, VA on the night of November 11. We were getting 5" of snow that night and the band was quiet, but I did hear WKBY and quickly wrote as much as I could from them at 5:13 pm. Later, WSLV-1118 in Ardmore, TN came over WBT with local nx at 5:28 pm then faded, and came back at 5:43 pm to s/off mentioning Southern Gospel. At 5:41 pm, WAMG-1138 in Gallatin, TN came in with some local nx and s/off 4 minutes later. Av/1 from WAMG said my information was not correct, but the s/off was and so I got the confirmation! Finally, WSJP-1136 in Murray, KY came in for 10 minutes at 5:52 pm with caw mx, KY and AP nx and an ad before KWKH came in. Another strange night: the 15th I did not hear any eastern or western stations from 1500 to 1600, but instead in their order WBSC-1550 at 5:04 pm; WGSR-1570 at 5:12 pm; WHOG-1570 at 5:24 pm; WSSA-1570 at 5:30 pm, WATM-1590 at 5:32 pm; WPMP-1580 at 5:48 pm; WRDN-1600 at 5:50 pm; WSDL-1560 at 6:00 pm, and WKWF-1600 at 6:06 pm. It is only the 2nd time I've over heard WKWF which is in Key West, FL; WRBN in Warner Robbins, GA, and wSDL in Slidell, LA. I needed and sent reports. Also, at 5:30 pm, Bahamas was coming in well with distortion on 1548 for more than 1/2 hour! The Caymans on 1555 at 6 pm was just heard giving mx, but not well enough. The last unusual night was on the 17th whom I heard WOAP-1886 at s/off at 5:15 pm, WZXY-1446 in Cowen, TN and by their ennouncements the voice of the hogs at s/off at 5:46 pm; Nx radio 1460-WWCN in Albany, NY coming in well, but fading at 6 pm with CNN Nx. and back-to-back with different nulls on 3WO-1430 in Panama City, FL, an xint copy of caw mx and local ads at 6 pm and WJRB-1438 in Madison, TN with caw mx and nx at 6:24 pm. Let time I heard from WJRB was when it was WENO in June of 19711 Finally, heard the test of WLMT-1140 at 12 am on 11-21, but conditions weren't good enough, although I did call the CE and he said he might reschedule another one later as I did mention WRVA is off Sunday, but thanx, T. C.1 Sorry this was so long; more stuff next week. 73's.

Jeff Kadet - W3CRH - Box 28 - Macomb, IL 61455 (pm 12-3; rec'd 12-6)

(309) 833-1869 Keep EST! Why tamper with something which has worked successfully for so long? I just got a new toy to play with. It's an ICOM-745 which is their answer to the Kenwood TS-430. It's a hem transceiver, but also a hot general coverage receiver from 180 kHz-30Mhz (there's another example of stupid tampering, changing kilocycles and megacycles). The unit has a s parate connection on the rear for a medium wave antenna and it seems to work very well on BCB. They put a 4 kHz am filter in this one instead of the 6 kHz one in the R76, so it's better on splits. Audio quality is quite respectable and it comes with a tone control which helps. It's also got 16 programmable memories (including mode) plus memory scan and bandscan (great if you have some time to kill and want to listen to everything between 100 kHz-30 mHz, hi-Another useful endeavor is to scan between 1600-1800 kHz at night and pretend you're in "Star Wars".) The set is also lightweight, comes with a leather-like handle, and can be used mobile. Effective passband tuning, IF shift, decent notch filter, and a noise blanker which works on the Woodpecker are other features. Only one minor problem: the notch pushbutton won't stay in. I used my Drake R7 as a trade-in (got \$610 for it; it's a shame no members wanted it). After using the R7 for about a year I decided to give it the heav-ho for a few reasons. Most importantly, it was just not that much fun to use. Only real complaints about it were its dismal notch filter (a serious problem and I'm amazed that Drake couldn't do better) and (to me) an inordinate number of internal birdies. The advantages of the R7? Decent filter options and their infamous AM passband tuning. I also liked the way it looked, hi. To Mr. ERC: The term "old man" is a form of endearment and has nothing to do with ago. I was called an "OM" when I was 12. WHEN-576, the carrier current station at Western Illinois University in town, has bumper stickers. If anyone wants one send an SASE. 73.

Daniel Bartek, Jr. - 388 H. 2nd St. - Wahoo, NE 68866 (pt 12-6; rec'd 12-9)

Not much new out here! There was a bad snow and sleet storm I missed by going home to NY over Thanksgiving. Ok by me. Flew back to Omaha airport Sun. pm. Had a flat tire. Some days, etc. Such is life! To many more important things to worry about! Paul, if you mated your Dodge Colt (the older one) and a Mustong, would that make a wild pony? Humm!! (hi!) (It might make the California DMV wild, hi -pls) Got here to Wahoo later Sun pm. High point of day was hearing CBL-746, ON (Toronto) on Sony Walkman AM/FM tadio-excellent audio quality. Too tired to DX, though. Belated Happy Hanuka and Merry Christmas to all our NRC members worldwidd! No new DX to speak of this Beason, though. Now if I could just verify Nibi Nibi ... 73's.

Monald Purdue - Route #1, Box 224 - Byron, MN 55928 (pm 12-2; rec'd 12-5)

As a new member to the NRC, I'd like to muse in DX News. Ht. there! This is my first report to Musings. I started DX'ing in 1969 with an old Realist Astronaut-5 Portable and in 1978, I bought a Realistic DX-120 (a couple of junkers). Then in 1973, I bought a Realistic DX150B (a better-built receiver). Then in 1979, I bought the DX-300 which works quite well (except for the overloading problems) with the Palomar engineers loop antenna at 20 db attenuation. Did you know that TA reception here in HN is possible? Well, it is; I have picked up hets (sometimes loud ones, too) on 782, 1061, 1464, 1457, 1586, and 1593 in the past. Between 0100 and 1830 GMT on 11-11, a het on 1161 came in and out several times; it wasn't TVI (the TV was on in the next room during that time). I suspect it was France. I am hoping that the A-index will stay below 5 for a week before I make any more attempts on TA's. Does anybody know where KAXI-1300 is from? It was coming in at 1910 ELT and KGLO-1360 in Mason City, IA was coming in too strong. 73 and good DX. (And welcome to you, Room; perhaps your next Muse will have definite ID's from TA's1 -pls)

Richard E. Wood, Ph.D - College of Education - P. O. Box 959 - Abha, Saudi Arabia (pm 11-30; rec'd 12-9) It appeals to my Scottish heritage (I was born in Dunder) to receive the 11-21 DXN postmarked 11-17 and marked "surface mail" in (unnecessarily?) large letters, on 11-28 - delivery was obviously by airmail anyway. And congrats to Guy Kudlemyer on an Informative Husing in that issue, with good tips on high school football as a good source of DX loggings. As I never attended a U. S. high school or played U. S. sports. any info on this is part of my education now. Also in that issue, congrate to new Hawaii resident (malihini, in Hawaiian) John T. Arthur for an akamai (on the ball) bandscan from Pahoa. Contains several which I did not catch in my old Lanikai (Kailua, Oahu) days or on my summer trip this year, notably KBAI-1158 Morro Bay, CA, KNCO-1256 Grass Valley, CA, KVAN-1556 Vancouver, WA, and KNIX-1588 Phoenix. With Mauna Loa between Pahoa and Kealakekua, KABC-798 CA should be easy there, over or under KKON HI. Also, at least with a loop, things like CBU and XETRA-698, KUGN-OR 598 and others on Honolulu channels. Was surprised to see KYJC OR as the only listing for 618. I found KPRC CA more frequent. A frequency which was blank in John's list, but which provides a good example of a regional channel dominated by a state not touching the Pacific, is 638, which in Hawaii usually shows KIDO ID, with similar-sounding KIDD CA in second place. The pending move of KIPO-1358 HI to 578 should free that channel, but the new station in Lanai City, the first on "Pineapple Island", will block 1389. Rumor had it this summer that the pineapple industry on Lanai and elsewhere in HI is on the way out and will be succeeded by tourism and residential development, so DX'ers might consider buying land there, though they would probably prefer a location shielded from Honolulu, as John has wisely selected. After, Lanal, Molokai will be the only major island without an AM'er. In news from this area, Iraq is jamming about seven Iranian frequencies in Arabic, and someone is jamming Tel Aviv-738 and Syria-666, 783, and 828. An unID probably from Ethiopia is heard on 774 at dusk before Middle East Radio, Egypt, takes over 774 with its Wester programming including rock and English lessons (Saturdays at 1905 UTC). Tabriz, Fran-1152 is heard in the minority dlanguage of Azerbaijani at 1818 and again 1918. Congrats to Eric Buenoman, whom I ment this summer, on his "Bandscan" column. Christmas day will be a workday here, not mentioned in local EE newspapers.

Harry J. Hayes - 9 Henry St. - Wilkes-Barre, PA 18782 (pm 12-6; rec'd 12-9) EST. As of today 12-5 I noticed for the first time daytime stations staying on until 6 pm. I am assuming that today is actually the first day of this practice. I noticed WALK-1378 Patchogue, NY, a daytimer, still going strong at 1725 with caw mx and much news about local roads and wx cx. I thought first this was on emergency or something. 1370 WLDM-1570 Springfield MA on top with all-nx format. 1733 WVAB-1558 VA. Beach, VA with oldies rar. Other DX since I long since reported to your 11-18: WSAY-1480 Salem VA at 1716 and at 1748 WAMY-1580 Amory, MS. 11-23 2335 CFOS-560 Owen Sound, ON. 11-25 KFI-640 Los Angeles CA up through WHLO at times with rar mx at 8139. 11-26 WLTC-1370 NC with s/off at 1715. 1728 WTTS-1378 Bloomington, In cut pwr. at 1729. 1739 WDEF-1378 TN good sig. 12-2 CFBK-638 Huntsville ON on top with "Customs of Christmas:" feature. 12-4: 1215 WIMS-1420 IN, ID then cut pwr. at this time. 1736 WLFA-1598 Lafayette GA s/off at this time. Really not all that much netted on the band for a November, only 2 new ones for the month. This low tally was helped along by low enthusiasm to DX this month for some reason. Also SSS comes at dinnertime, and I'm more often than not, hungry. 73.

George B. Sherman - Box 2284 - Minneapolis, MN 55462 (pm 12-8; rec'd 12-16)

More DXI on 11-12, 13 the Minnesota DX Club had our annual DXpedition west of Northfield, MN. Part of the time I used an NC-183 belonging to NRC member Mike Bates. Selectivity was measured at 1.3 kHz in widest crystal position. We used only 56' lw but set had been modified for 15 db gain over specs. Some of the best heard were NZ on 756 and 1835, Australia on 762, 747, and 774, and Piji on 774 and 891, only 5-5 or so compared to nearly S-9+26 from WLSI Fiji had what sounded like chanting with mx and sounded like a semi-local on 774 near their s/off about 5:05 am. Others were had 4-6 am or so.

11-18: Thed XCCC-936 Carlabad, NM very poor at s/off (in English) 6 pm after Spanish proming. WLNT-1148 Loudon, TN on DX Test 11-11 5 pm Su 11-20, ID's and country, poor due to WRVA, local WDGY-1130 and very local buzz. Good short skip on 11-24 brought 4 new ones: WFAN-948 Fort Atkinson, WI s/on with SSS at 6 am, 59+20 way o/ORM: WBKV-1476 W. Bend Twp. WI with "WBKV nx" o/ARM at 6:84 an; wMPP-1476 Chicago Hts, IL at 6:06 am with black format o/WMBD/WBKV; WIXN-1460 pixon, IL with local ad at 6:11 am. On 11-25 I had WGLR-1280 Lancaster, WI at 7:02 am ID with local WWTC partly nulled: KCHE-1440 Cherokee, IA with aports and car ad c/local KGLD about 7 to 9 am but lost exact time; KCLO-1410 Leavenworth, KS on new fulltime sked ad 11:87 pm ID by w and country u/WIZ4. 11-26: heard KDKO-1518 Littleton, CO with black mx and faded up for ID at 11:06 on o/KSTP splash and WLAC. WTCK-1360 Lexington KY 12:24 am o/WOOD on 11-29 with ID and temp: WIGT-1600 Horseheads, NY, presumed the one of WCFL at 6:05 Am with "Onx" sponsored by Easy Ridor Transit System; WEEP-1880 Pittsburg, PA in mess but up for WPXI-TV ad at 6:18 am: WKAC-1080 Athens, AL at 6:22 am with ID, mx, wx, ad o/QRM, also 11-29. Now 2,054 heard. I've heard over 500 stas tast 4 months and 45 of them were heard for 1st time. 73.

Brad Chappell - 49 West Ave. S. - Hamilton, ON LBN 282(pm 12-6; rec'd 12-10) (519) 529-8751 On 11-30 I made a gruesome discovery. I knew that CFTR-686 will soon be going 58 kw and moving to Grimeby but I stumbled across their antenne site. It is only 3 miles from my parents' house. I do most of my DX'ing from there. WRKO-MA is suddenly my most wanted. To make things worse - CKEY-590 has been given the green light to make an identical move to Grimsby, and at 50 kw. Since they have to protect CKTB-610 they will have to he located as far west as Grimsby goes. I wonder if CFTR and CKEY will share ground systems, hi! Anyway, I took a picture of 6 completed towers and two just started with Toronto visible about 35 miles across the lake. /// On the DX side of things: 18-14: WTZQ-1080 WV at 6:46 pm. 18-15: CKVL-850 PQ at 6:20 pm with FF. WABJ-1490 OH at 9:12 pm with nx. 18-17: Surinam 725 at 4:25 am with DD talk and 88 mx. 10-18: WBCB-1530 PA with ROK at 6:40 pm. 18-21: WJIK-1580 NC at 6:30 pm with a/off. 10-23 WB2YT-1140 PA at 4:45 pm with REL mx. 10-29: WJSC/P7-1528 at 8:12 am. Any ideas? 11-5: WGIC-1588 OH at B:15 am with caw. During a spectacular evening I got CKSO ON blasting local CKMW off the dial with ROK. Both orient to the north from here. Thenb I decided to try for CKLC-1380 ON. As I came up to 1386 I hit a hefty St. Pierre et Miquelon 1375. As if that didn't blow me away enough I got my first 4 Th's. Unfortunately, my loop/preamp wasn't available. Details are in IDXN (51-8). 11-13: WAMB-1170 TN with MYL at 5:22 pm, WSVC-1190 TN at 5:30 pm with s/off, WHIY-1190 AL at 5:40 pm with caw, CM77-1200 at 8:45 pm with distorted mx, WDGR-1210 GA at 9 pm with caw, WSGC-1400 GA at 9:32 pm with MYL, CMCA-590 at 10:42 pm, CM7?-946 at 10:42 pm (R. Reloj). 11-14: CM??-740 at 1:57 am (R. Liberacion) /// I'm surprised that very few comments have been made on this time subject. I think that Musings could be sectioned off beginning with International, AST, EST --- PST ending with Paul's Muse. If everyone put their local ST at the top of their Muse, it would only require a slight bit more work for Paul. (If averyone had done that in the beginning, Brad, the time problem wouldn't have surfaced at all! -ple) 73's and happy holidays.

This is my first Musing, so I'll take a moment to introduce myself. I'm 27, and have been DX'ing for the last 9 years, off and on (more "off" than "on"). I've got 123 sta's logged, with 64 confirmed. (I'm a little different - I don't consider a station logged unless I get enough to try for a vorie.) Activity here has been good lately, and I've been giving my DX-302 and its 135' longwire a workout. The best frequency so far has been 1220. After Semi-local WKBK-NH signed off, I've logged sign-off of WSCR-CT, WSME-ME which should have signed off earlier, but stayed on until an overtime NPL game ended, WGNY-NY was also heard, WRIB-RI got through, and WENC-NC slipped in. Strangely, WGAR-OH hasn't been heard yet. Strange ... Other catches are 1556-WMLB-CT, clear under WNTN-MA; 1438 WNJR-NJ came in quite strong. On 1598, stations logged include WSMN-NH, just an ID, but not enough to verify, and WAKR-OH, mixed all up with WENE-NY, with pop mx. Since WENE is caw (I think), it was fairly easy to separate. On 12-4, I logged WPIP-CT, clear and coming in over WTOP-DX. That was on 1506. The best was early AM, 12-5. The first catch was WAIT-IL, 826. Apparently WBAP-TX was off. Several semi-locals were logged, and the final catch was WPCN-PA, with weather for the Poconos, and a nice, clear ID. Now, if a few of these would verify, I'd be very happy. I'll close here, and will try to report again later. 73's and the best of good DX to all, and may Santa propagate a .few trans-continentals to you all. (And welcome to the fold,

Patrick O'Connor - Plain Road - Hinsdale, NH 03451 (pm 12-7; rec'd 12-10)

Sidney E. Marshall - 7224 Pam Dr. - Millington, TN 38853 (pm 12-12; roc'd 12-14)
Only scattered times at the dials over the past 3 wooks
but have added 5 new ones to the log book to bring my station total to 1,138d
heard. "Newies" are: On 11-24 WMOP-988, FL was in at 4:26 pm to 4:38 pm with
nx, ID, wx, and s/off announcement. On 11-26 at 5:89 pm KATT-1148, OK was in,
over wRVA, with ID, report from Oklahoma Highway Patrol on death totals from
accidents, and wx. On 11-29 at 5:88 pm KATI-1568. No surfaced with full s/off

Patrick. Koop that DX-302 warmi -pla)

announcement heard. There was no sign of WPAD or KCYX which is very unusual for this time of day! Next on 12-6 I finally heard WXKY-1369, TN which was in for a couple of minutes at 4:43 pm with market report, local spots, ID'ed and into mx before fading out. For a not-too-distant station this has been a tough one to log. Both their day and night patterns do not favor my area. On 12-11 K2ZM-1369, LA was in and out several times, over KXOL, with mx and several ID's heard between 5:29 and 5:54 pm. This one was on late, or has the 6:03 pm s/off for "daytimers" been put into effect by the FCC7 (Apparently, so, Sid -pls) I also noted a couple of other "daytimers" on past the usual December s/off on this date. All times show are CST. Will be having a rather heavy work schedule until the start of my 1-week vacation in Jenuary 1984 so I may be absent from these pages for the next few weeks. So till then, good DX'ing to all.

#### Radio Roundup

Peto Kemp - Bethel, CT (pm 12-12; rec'd 12-15)

Season's Greetings to all NRC'ers ... Beginning December 5, WJIT will simulcast WASC-TV-s 11:66 pm news in Spanish ... WTTP, in Boston, is dropping its coverage of Boston University's football games and 68 other sporting events due to money problems ... The ABC Rock Radio Network will broadcast, via satellite, the National Rock Poll on January 6 from 1:83-8:88 pm EST ... KABC radio will no longer carry the "Ken and Bob Saturday Special" due to Bob Barker's one-sided editorials on animal rights and vivisaction ... The Mutual Broadcasting System and Dick Clark Productions have signed a five-year big-bucks contract to continue producing the weekly "Dick Clark National Music Survey" ... Wiw's radio listeners of Bob Trumpy's Sports Talk show became earwitnesses to the news, when a distrought woman caller threatened suicide. Trumpy talked with the caller for over two hours as police/telephone employees worked to trace the call. The woman, identified as "Sugar" was found and taken to the hospital ... Bobby Sharpe is the new overnight DJ at WORL in Orlando ... Mutual Broadcasting has sold WCFL, in Chicago, to Statewide Broadcasting Company, a Ploridian-based group ... In Boston, WHUE will become that city's first full-time AM-steroo station. WBZ has been experimenting with various systems over the past 18 months and is expected to go full-time AM-storeo on January 1 ... Radio listeners in Toronto seem to be enjoying the format switch of CJCL to oldies in an effort to upgrade its ratings ... Also, up north, the Canadian Broadcasting Corporation will begin 24-hour operation in January ... Dan Dierdorf is expected to announce his retirement from football and the St. Louis Cardinals and will join the KMOX sports team (I didn't think it would be to do the weather -pk) ... The FCC has announced that it will stop policing stations' call letters, thus insuring good taste, and so that they are not similar to other stations in their broadcast market. The court system will handle any problems of that nature and the FCC will just keep the records ... Uncle Ted, in Atlanta, has been busy upgrading MCNN. He plans to request an increase in power, from 25,000 to 50,000 watts, to insure a bigger audience. He was not at all happy about having to recruit fringe area AM'ers to carry the Braves games. It is difficult to compete with the mighty signal of WSB ... Dan Ingram, for 21 years the ever-popular DJ at WABC during its big years, will be returning to the airwaves in April, when he hosts the "Top 40 Satellite Servey", a weekly syndicated venture by Radioradio, the CBS Young Adult Network ... The word in the Big Apple is that Big Dan Ingram is also looking for a morning DJ slot ... Happy New Year and good DX'ing to all.

Peter V. Taylor - 2614 Jackson St. - San Francisco, CA 94115 (pm 12-13; rec'd 12-15) The long-awaited KSFO-KYA-KOIT "happening" took place at 63:60 12-13. The result? King Broadcasting now owns KSFO, and features Gene Nelson, Russ "The Moose" Syracuse, Sam Van Zandt, Carter Smith, and Al "Jazzbeaux" Collins between 6 am-2 am. The station receptionist couldn't even tell me today, 12-13, who's doing 2-6 am! They will be playing some of the MOR-type oldies, but obviously not as many as the former Gene Autry/GWB KSFO. KOIT(AM)1260 is Bonneville EZL and will complement their 96.5 FM and put them in a stronger position against dominant KABL AM/FM. KFAM-788 is fine at night, but note that it is ID'ing North Salt Lake City, not Bountiful. KYXE-1620 Solah-Yakima logged 12-12 98:25-91:18 with caw, over (and mostly) under KTNQ-SS. Bob Reece at the stations says they are 5 kw/586w U-5, directional days to protect the forthcoming co-channel in Moses Lake, which for years tried for fulltime on 1260, but finally got it on 1629. WWL still dominates KORD-870 here; guess I better dig it out before KIEV comes on at nights! Happy (safe) New Year, everyone.

Robert Kramer - 6416 N. Richmond - Chicago, IL 68645 (pm 12-13; rec'd 12-16) Hi out there. It's been a long time since I Mused so I'm about due. A great sunset opening hit on Doc. 10. It started with KWYR-1269 winner, SD totally dominating the frequency at 3:15 CST. This is about an hour and 45 minutes before their local sunset. At 3:36 KLTC Dickinson, ND came blasting through on 1460. This is the earliest I have ever had an MST station in. KKBJ-1360, semi-regulars here this year, was in far stronger than usual at 5 pm. Next, about the same time was KHDL-1410 Beulah, ND coming through somilocal WRMN. 5:20 produced KWYO Sheridan, WY way u/YRMN. Things stayed quiet until 5:53 when the big shocker of the day, KMJJ-1080 Portland, OR popped in, 45

minutes before pattern change. They were blasting in by 6 pm. I got a good tape of their ID. This was my first PST station at sunset. At 6:81, KOCH-1060 Cladwell. ID was ID'ed coming out of religion. Unfortunately, all of the previously mentioned stations were unneeded. The only new atn was at 6:29 when KOBH-583 Hot Springs, SD was ID'ed, dominating the frequency on post-sunset authority. This one was operating with 560 watts or less. Also in this opening, but not ID'ed, KERR-750 Folson, MT and probably KING-1893 Seattle (rock mx. no ID's gone by 6:15 pattern change). In all I'd rate this the best sunset opening I over noted. As it turned out it was another instance of what we in chicago call Johnstown Effect. This effect is DX to a northern latitude, or other rare area, just prior to the onset of aurora. It was named after the first time we noted this type of reception, WIZR (now WMYL)-938 Johnstown, NY back in 1974. It appears that most strange openings to the NW around here auroras. 73... RK

Greg Monti - 1301 S. Cleveland - Arlington, VA 22284 (no pm; rec'd 12-16) A somewhat belated response to some of the questions in Peter Weeks' Muse appearing in the 10-24 DXN: I think the policies in Europe regarding high-powered AM stations are twofold: (1) The high-powered provides a strong signal over a large area. Much of the problems of AM in the U. S. stemd from a poor received signal to noise ratio due to station RF signal levels running out of steam amid heavy electrical noise only a few miles from their transmitters; and (2) high power provides reasonably even coverage of a country (and possibly its neighbors) without requiring the installation of networks of lower power transmitters. I doubt that most of those transmitters are directional as they operate on the European equivalent of clear channels. I quess a side benefit of high power is that it allows lover average percentage moduciation of the transmitter resulting in less adjacent channel splatter. The use of low-power networks all operating on the same frequencies can be a tricky engineering problem. Most of these stations are probably nondirectional but either use precision frequency offsets (operating, say 20 Hz apart in adjacent service areas so that any "beat note" or heterodyne between transmitters is too "fast" and too "slow" to be heard as an audio tone). Alternatively, the transmitters which are all carrying the same program can be operated "synchronously," on exactly the same frequency and staying in phase, wavefront for wavefront. The disadvantage to this is that natural "peaks" and "nulls" in the composite coverage pattern will develop, making for some "holes" in the coveragearea of the whole network. Perhaps a European member or a TA DXpert can fill us in further. 73's.

G. Harley DeLeurere - P. O. Box 16 - Hendricks, WV 26271 (no pm; rec'd 12-16)
Winter is here, and DX'ing has been relatively good.
Radio Paradise-825 was heard for the first time the other evening. If it QSL's,
Saint Kitts will be country \$71 for me. What is KLSM's correct address? I had
my letter to it returned. Morry Christmas, and Happy New Year.

Tom Commatser - Route 9, Box 78 - Sevierville, TN 37862 (pm 12-13; rec'd 12-16) Hello again, and I hope you all had a Merry Christmas by the time this hits print. If I had the kind of luck I had a couple of weeks ago, this may not get to Paul before 1986 (and I'll try not to lose Muses in the Black Hole [aka John's kitchen table] -pls) Finally got a solid copy on the WCHE f/c, thanks to a tape of the Nov. check courtesy of Dave Schmidt. After hearing the tape, I'm positive I had him the last couple of months, but still no ID's have been heard so it doesn't count. Will be losing sleep the weekend of the 18th and 19th looking for tests - WASG on the 18th and KBYE and WCHE on the 19th. For those of you looking for another shot at WLNT-1140 Loudon, TN, look for them to run another test on Sunday morning sometime early next year. Speaking of tests, am I a one-man CPC? The only other test I've seen this year is the KBYE test arranged by Al Resnick. DX should improve around here some as the old TV, which was a notorious TVI generator, has been retired; its replacement isn't nearly as obnoxious in the TVI dept. Looks like the auto Manufacturers are backing the Motorola C-Quam stered system; Chrysler has just announced it will be going with that system. (Not surprising: Chrysler has been using Motorola-manufactured rx's for many years -pls). On the transmitting end, add WASG-1140 Atmore Al to the list of Motorola C-Quam stations; per the reply to my request for a DX test, the station is currently broadcasting in Motorola Storeo. In the DX department this wook WHN-1858 was heard on 12-1 at 5:53 pm EST with mention of space shuttle and country mx. This is the best reception I've ever had on this guy, although CHUM was still very much in evidence. At 5:57 that night I heard CHAL-900 ON with a Christmas promo and pop mx. The best catch of the evening came at 6 pm when I bagged WOSU-826 in the clear with promo For NPR into ABC nx. WAIT was nowhere to be heard and WBAP was a very distant second this night. Looks like the situation with WDGR-1218 GA has finally been Settled. One suggestion for the FCC: before they start granting CP's for the broken-down clears, they should study the country and determine where these new Stations are really needed. It seems to me like many of the applications for these channels are for very small communities such as the one for White Pine, TN 44)

which is listed as wanting to move from 833 to 678 kHz (probably due to WHDB). Guess I'd better get out of here and catch up on some sleep; It's going to be a long weekend. 73's and Happy New Year. (Nicholas Johnson, where are you when we need your good same on the FCC? I still find that another GY channel or two should have been created to serve the smaller communities, rather than to usuce the coverage afforded by the clears. Are we headed toward the pre-1927 radio chaos? -pls)

#### \*Florida Joins His Double-century Club\*

Ernost Cooper - 5 Anthony Street - Provincetown, MA 62657 (pm 12-13; rec'd 12-16) (617) 487-9337 EST. Three nice v/1's have arriven since the last Muse: Two from Florida give me my third 200-verte state to go with NY and PA in WSTU-1450 and WMBM-1490. Also a fine v/1 from WLNT-1140 Test, for whichs thanks, Tom Connatser! DX: Wed 11-23: UnID TT's on 1230 and 1318 between 1 and 1:30 am. Thur. 11-24: Unn WAEB-798 o/WEAN today; odd, seeing as how WARB protects WEAN, and I'm in the same direction. This is t en, and unn old friend CBK-990 was up top later, at 2. 11-25: R. Antilles-1450 was in again this twilight at 5:27 pm; watch for this one on AU eves. MM 11-28; A third try for a WPTH-1596 verie on his r/c - mx 12:45-1:09 am s/off. I called them and the engineer gave no his name and promised to verify. WGBS-718 was in nicely today with WOR off at 2:56 am. Unn KOA held 850 at 3:67. Tues. 11-29: Prance-864 was noted this morn at 1:84 and on 1286 at 1:87, with WQIK-1328 loud at 2:21 am. Wed. 11-36: TT'er on 1550 1:11-1:15, then to 1480 where a guy said, "You can get AYDS in your drugstore!" (Deponds on the druggist, I guess!) Thur. 12-1: A no-speak TT'er on 968 at 1:31-1:42 am, and R. Clarin-868 is back to AN'ing; solid signal here at 2 am ID. Fri. 12-2: Rare but unn WGLI-1296 was noted on top of WWSA and AN'ing at 2:15, F DJ, and MoR oldies. WICE-1298 scems to be AN only on Sat. and Sun. AM's now, in Portuguesa. Sat. 12-3: Somebody on 1468 had North Carolina-Fordham BKB at 1:23 tune-in till around 2 am, N. C. announcer saying they'd be on the next night again if the Tarheels win, and they did. SM 12-4: Report sent to WZON-620, ex-WACZ, ex-WLBZ. They have a fondness for the letter 7 up there! I overslept MM 12-5; how about that? Tue. 12-6: Loud TT graced 1250; was it perhaps WMTR readying their night pattern? That SSS, Horocco-1844 again very strong at 4:57-5:26 pm. Fri. 12-9: "Popular" on 950 u/WIBX with no sign of WPEN 1:43-2:28; I believe this is HIG, Santo Domingo; right, Cesar? Sat. :12-10: An SS on 1320 mentioning Cara often 1:42-2:39, but no ID was caught. MM 12-12: A blah morning: nothing exciting except an unID TT u/WBSM-1420 which quit at 1:08. Tue. 12-13: Jeff Cohen called to alert me to a WBEE-1578 test, but too much CKLM here; they might have ID'ed at 1:28 - somebody did, way u/CKLM. A very loud SS was AN'ing on 900; noted at 2:35; didn't sound Cuban. Also constant TT all AM on 1146 again; I suspect 'tis CBI. C U M 7.

Jeff Lockwood -2883 W. Sligh Ave. \$612 - Tampa, FL 33614 (pm 12-13; rec'd 12-16) First time in over a year I've been in these pages, so as the new year rolls in I'll sumup 1983. DX-wise, it was a bunt, primarily due to preopecupation with computers, studies, work, and home video (my latest craze), and also the result of the shotgun loop falling off my RF-2600 one too many times. I knew that double-sided adhesive tape wouldn't hold forever, hil in June I hit the road in the Pacific Northwest (San Francisco to Portland for a week of sightseeing and a personal visit which took me to the coastal town of Plorence, OR. I almost did a bandscan thore during the daytime, but the relatively poor sensitivity of the 2689 and the lack of water paths for groundwave failed to produce such hoped-fors as KCBS and KGO (although the latter was audible nearly to Medford on the Delco car radio). Strongest signal was KPNW-1120 but even that was only mdoerate due to Const Range. The nearby sand dunes look like a perfect sport for a beverage setup, but a lousy place for radio gear, especially in high winds. In August I monitored KTRH-740 during Burricane Alicia. As usual, they were mixing with KRMG that night, so no indication they were using day pattern. On the local scene there are three teams with NO local radio coverage - the Rowdiss (at least indoor - though WPLP will still cover them outdoors), the Sarasota Stingers of the Continental BKB Assn., and the just-revived Univ. of Tampa BKB. The Spartans are on the court for the first time since 1971. Their FB games were carried on WFLA (with the late Jim Gallogly doing play-by-play) until the FB program folded in '74 due to \$\$\$ problems. WPLP is fast becoming THE sports station here dospite their signal problems in Tampa - they will even be carrying the Super Bowl here. Bill Townshend called here last month during his travels; no visit in person due to a bus foulup. Ch, well. Hope everyone has a Happy New Year.

Guy Kudlemyer - 1314 City View #1 - Eugeno OR 97402 (pm 12-14; rec'd 12-16) What's News in DX from this neck of the woods: PM DX'ors, take note: This area's newest is finally on: KDUK-FM. That's right, K-duck (quack!). They seem to be a mixture of soft rock and contemp, country crossover and other light tunes. I believe they're 100 kw and have their transmitters located near Coburg, OR. New stuff heard from here (and other pertinent data): KBUH s/off caught on 10-27 with ckw mx and ments of 500 watte. KHYV heard for first time since their ex-KBEE call change on 10-28 at 6:34 pm with "If Anyone Palls" (my favorite songl). CKOO ID'ed on 10-28 at 6:53 pm with a remote from

some sort of Home and Garden show, or something. KART is a super past here, knockig out any chance of hearing even semi-local KNND. They also seem to be on some sort of caw mx satellite net with ex-WWL'er Charlie Douglas. On 11-19 newie KBRE 10'ol at 4:07 pm with "winter storm watch" wx and ment. of 39 degrees. On 11-25 at 4:89 pm, I heard elevator mx on 700, then, "In a class by itself, the easy music on AM 780." "Good afternoon, KFAM news ... " was then heard at 4:15 pm. Also on 11-25, I heard "KBKR AM and FM in Baker, OR" at 5:58 pm - I've been stalking this one for eyars, and, finally with persistence, I bagged it. On 12-2, I logged newic KAGT at 5:14 pm with ments, of Anacortes and a Seattle Seahawks comm. Then at 9:18 pm, I logged KREW on its new freq., doing battle with KCLG and KGYN, but having a rough time of it. Beacon "INE" has been heard recently also. Being an amateur meteorologist as well as a DX'er, I've noticed that when the barometer is lower than 29.80 in the afternoon and a storm is just off the coast and approaching, ex to the east are often excellent at sunset. Example: On 11-10, the barometer was 29.78 and falling at sunset and WCCO was in like a local at about 16 min. before LSS. 20 min. after LSS, WREN was doing battle with the 2 WA pests and killing any chance for KLLK. It faded shortly thereafter, but I've never had WREN in that early before. Now I watch the barometer very carefully every day and jump on the rx when it's falling in the afternoon. Hope everyone had happy holidays!

Stephen H. Ponder - 4165 Glen Street - Bossier City, LA 71112 (pm 12-12; rec'd 12-16) Hello, out there in Radioland! It's been quite some time since I last Mused, and with all the excitement that I've seen in the pages of the bulletin, I figured I'd better hurry up and put my two cents' worth of before it's too late! The DX here in the swampy South has been good (at least the times that I've been at the dials it's been good). The DX Entry has allowed me some pretty good catches, some of them being KITA-1448, Little Rock, AR, and WCCL-1598, Jackson, MS. I know especially about these two because the local mail turtle has returned my letters to me because their addresses have changed since the last DX Log. Other catches include WAMB-1178, Donelson, TN: WLDS-1188, Jacksonville, IL, and KHAD-1190, DeSoto, MO. I have not received any veries since last Muse, but that doesn't mean that I have lost hope entirely! Anyway, I've really been trying to put more time into the dials, but schoolwork (both teaching and graduate computer classes) really ties up my time. The Christmas cantata at my church is getting closer, and that will take up the rest of my spare time, so, hi, looks like I'll not be spending as much timne DX'ing as I'd like to. Was I rambling? I guess that means it's time to close for now. Good DX out there, and try to stay warm this winter!

Andrew Reninger - 2 Grove Street - Glen Head, NY 11545 (pm 12-12; rec'd 12-16)

This is my first Muse. Been DX'ing for about a year and a half. I vote we make up a new time zone, such as National radioclub Local Time) which would be Moscow Standard Time + 1/2 hour, except alternate Thursdays, when it would be Moscow -1/2. Local superpest WNBC-669 is giving away AM stereo receivers, but I don't know for what system(s). In the meantime, not being a technical wizard or genius, I havent got the slightest idea of how to hook up a loop antenna to my Panasonic RF-2200. Any suggestions welcome, thanx. I'm also into SW and PM (horrors, aghast!). I would like to suggest that the column editors devote space once in a while to tell us how to use their columns. For instance, is a 1/c something we can count on all the time, or a one-time thing? What does "\*" mean in DDXD7 Some of us new guys have no idea of what's going on. Thanks, guys. Everyone in my area is giving away Cabbago Patch Kids (blech!). Looks like a good season well under way. Have a good one. 73's and Good DXI [And welcome to you, too, Andrew; your humor is appreciated. I tend to agree with you in your comments on the overuse of symbols; I've tried to eliminate a lot of them in Musings to make the column more readable. However, space is at more of a premium in some of the columns. Check your new member booklet [when you receive it] for the more esoteric items -pls)

#### "November 13 Was A Great Sunset"

Dob Smolarek - RD \$1, Box 63 - Whitehouse Station, NJ 08889 (pm 12-13; rec'd 12-16) After reading Bruce Conti's Muse on Dec. 5, and seeing Rich Harrison's loggings from Ocean Grove, NJ in DDXD, I realized Nov. 13 was a great DX day. So I opened my 1963 NRC calendar to see if I heard anything that day. I write down what stations I hear in the calendar. Voils, I was down in Atlantic City, NJ that day. While my parents were gambling, I went to the top deck of the new Ocean Dne shopping mall that juts out into the Atlantic. I had my brand-new \$20 TRF with me and I heard a lot. I thought, boy, what a lot of stations I can hear by the sen. Here's what I ID'ed at AC. MPTF-688, WVOK-698, WGBS-718 under WOR, WHNNA-738 Gretna, VA, WCPS-768, WHNC-898, WGBS-928 blasting in: I never heard this guy before; WLEM-1258, plus many others I couldn't get call signs on. What a day to be away from home. Thanks to Paul Mount, I have joined Radiophiles, another radio club. They are very good. They give format changes AM and FM, disk jockey moves, and have a Musing section like NRC. Happy Holidays too, all.

Neil G. Zank - 623 Lyncrest Dr. - Lincoln, NE 68516 (pm 12-14; rec'd 12-17)

I do believe we have ourselves a DX season this time around. d At least my DX results have been apoppin'. This is it: 10-31 WXVI-1686 Montgomery, AL 1:35 am CST with mellow soul mx: 11-7 KWPM-1456 West Plains, MO 1:20 am with caw mx, nx promo; KADR-1486 Elkador, IA with caw mx, partial ID (must have been ET'ing); 11-4: KMTL-760 Sherwood, AR 4:45 pm with gospel mx, s/off; 11-15: KKDA-730 Grand Prairie, TX with upboat soul mx, AP net nx; 11-17 KRIO-918 McAllen TX with rock mx, 12:45 am, win turkey contest; 11-21; WLNT-1146 12:00 am with ID, caw mx for a few minutes thru WRVA; KXOI-818 Crane, TX 6:55 pm with rel. mx, wx for Permian Basin: 11-23 CPOK-1376 Westlock, AB 12:54 am with caw mx, OK country slogans; 11-24: CHOK-1970 Sarnia, ON 1:45 with caw mx, good enought for a report this time. 11-27; KBOI-676 Boise, ID with NBC sports, rock oldies?? mixing with WMAQ: 1688-KXVI-1688 McKinney-Plano, TX 1:25 am with Christian rock mx, request line #: 11-27: KIKK-650 Pasadena, TX 5:80 pm thru WSM with ID, ads; 11-28 WKXC-1470 New Albany, HS 12:50 am with caw mx, wx for Unition County: 12-11 CKAR-1350 Oshawa, ON 1:15 am with AD. Contemp. mx, ads and 1358-CKAR ID's; 12-12: WCHU-1506 Soddy-Daidy, TN 12-48 am with MYL mx. ID for WCHU-FM "Choo-choo 102". And that is the basic new DX for me lately. Otherness noted in my book follows - not new but rare or changes: 11-1 KKXL-1448 Grand Forks, ND c&w mx at 2:10 am; 11-7 WLSQ-958 Montgomery, AL 6:88 pm with rock mx; 11-14 KURL-730 Billings, MT at 5:15 pm with tire ad, temp. check, MST time check, and ID; 12-5: WROA-1390 Gulfport, MS 1:38 am with ID and MoR mx; 12-12: WKKE-1180 Pearl, MS 1:48 am now with Music Country Network rather than MYL of last season. So you can see that my speaker has been rattling somewhat often. Veries in from WLSD, KRDZ, KWPM, KRIO, CHOK, WKXC, KXOI, WLNT. I have used my local CST in my Muse, but my attitude is that RLT should be used in Musings and DDXD; ELT is a good standard of reference and a large majority of NRC'ers are used to it.

Harry Hayes - 9 Henry St. - Wilkes-Barre, PA 18782 (pm 12-14; rec'd 12-17)

The band finally broke open at sunset again today, 12-13, after several days of being closed due to nurora ex. I am anxious to see what these new FCC rules of 6 pm sign off time for daytimers will do for or to DX. Will it hinder it or provide some interesting opportunities? The band has just not been very good to the west so far since 12-5. Most of my DX'ing has been of the informal kind; that is, DX'ing while getting supper ready or doing other such things. In this kind of instance I hope nothing really interesting shows up since I don't have my tape recorder by the radio when DX'ing in such a fashion. Sort of like playing Russian Roulette, wouldn't you say? Hi. Other things of a DX nature is that a big E skip opening showed up on TV and FM on 12-3 and lasted for several hours. This short of has my ears pricked up for this band for December at least and adds to the reason what I don't have much DX to speak of this reporting period. Here goes: 12-4: 17:15 WIMS-1420 IN somewhat rare here with usual WHK in the way. 17:38 WLFA-1598 GA hrd with s/off at this time. 12-5: New FCC hours noted in effect for I would guess those daytimers with the resources and desires to take advantages of them. Those stations noted so far going on until 6 pm are WALK-1378 NY, WLDM-1578 MA, WVAB-1558 VA and locally WMAK-738 Manticoke, also add to this WAJE-1580 PA. Only 2 new stations logged for the month of Nobember which has to to be an all-time low. I won't blame cx for this but myself; I just haven't been able to get myself to sit down in front of the radio much. Also bringing beer and other goodles to the radio site doesn't help much either in that I have a tendency to concentrate more on what I'm eating than what I'm hearing. A real no-no is eating potato chips at the receiver; this not only gums up the knobs of the receiver but the sound in your head is like DX'ing amid a severe thunderstorm. Happy Holidays to you, Paul (thanks! -pls) and belated wishes to my reader friends.

Karl Porth - 2714 N. LeClaire - Chicago, IL 68639 (pm 12-14; rec'd 12-17)

The first post-sunset operation noted here belong to WKKD-1588, which has been using 250 watts until 6 pm CST since December 5. (They just changed call letters, too, from WFVR.) Sunset conditions have been too erratic to check all the local and semi-local daytimers, but I've noticed WLIP-1050 and WBEE-1578 on the air until 6 pm. DX highlights for November include (CST) CHEC-1698 with pop mx and "Chec" ID's sister station CKTA-1576 had been heard a week earlier, at 1:20 am, on 11-7. New KVVA-868 with Spanish talk and PSA's, Mexican mx, first heard at 1:25 am on 11-6, noted many times since. WHEZ-1420, ex-Kentucky, heard with ID and ABC nx at 5:60 am on 11-2, and WZZZ-1316 heard with s/on at 4:59 am on 11-15. The evening of 11-15 was dominated by auroral cx, with many Latins appearing on regional frequencies. There have been several similar openings since, but not with as good reception as was noted on 11-15. The evening of 11-15 was dominated by auroral cx, with many Latins appearing on regional frequencies. There have been several similar openings since, but not with as good reception as was noted on 11-15. The WLNT-1146 DX test was shard weakly at 11:04 pm on 11-20, better later on through WRVA. Verifications have been received from KARV-618, KMTL-768, KSDN-938, WDGR-1218, WXLR-1498, and CKTA-1570. All the best to everyone in 1984.

Dave Schmidt - 42 Chelwynne Road - Castle Hills, New Castle, DE 19720 (pm 12-14; rec'd 12-17) Some strange conditions have been noted lately; they seem to vary from the finest possible to the worst in just a few hours' time! Heard/reported for this report: 11-21 WLNT-1140 12:21-12:31 am on their DX test, signal mostly u/WRVA but did note partial ID's, tone, and mx. 12-4: KPNW-1208 5:26-5:45 pm with hymns, ID/time check into religious news program, fade-free signal till pattern change. WNAX-578 5:58-6 pm with c&w mx, ID's between selections, amazing signal when I first tuned in but faded down by legal ID time (natch), never heard in the past 28+ years so a welcome catch, one of my better ones at sunset! CBW-990 was topping WZZD after 6 pm with CBC nx, very rare at that hour here (usually an early AM visitor!). By MM 12-5, auroral conditions set in and all the fine western signals were gone. 12-12: WCHU-1550 with standards, PSA's and ID's for "Choo-choo 162", 1:43-2:03 am, evidently an ET with FM audio, legal ID on hour. WHUE-1150 2:15-2:30 am with EZL Christmas songs, long ID on new AM stereo signal, good with WDEL off, last heard as WCOP back in the 60's! Verie total now stands at 1115 adding: WLNT-1140 DX v/f, WCRT-1268 nice v/l (said was an ET of new studio equipment, first report by PO), and a small v/l, program schedule and bumper sticker from KFNW-1200. The KFNW reply is the direct result of a technique Jerry Star introduced a few years back known as "The Verie Magnet", which is a special technique known by broadcasters alone! A few stations have been noted using post sunset power authority in the last few weeks, like WALK-1370 (thanks for the tip, Bill!), WLIM-1580, and WJIC-1518. WVAB-1550 was noted one night on what sounded to be full power but was not heard a week later at the same time, even announcing their extended hours but it didn't seem to last long! Once this PSSA gets into full operation, the low power levels proposed should be a real game for the DX'er! Until next time,

Paul Swearingen - 7310 Ensign Ave. - Sun Valley, CA 91352 The mild time controversy I've created has no perfect solution, of course; only a compromise is possible as NRC'ers live in time zones all across the globe. To choose a time zone simply because many NRC members live in it and have used it to report loggings in the past simply does not stand up as the best solution. Converting times twice (once by the Muser, again by the DX'er) is risky. And why bother with accuracy at all? Well, let's take Dave Schmidt's logging of WNAX-576 12-4 from 5:58-6 pm (presumably EST). SSS and SRS DX'ing times are very critical; by knowing what time Dave heard WNAX in Delaware, DX'ers from Iowa to Delaware may plan their DX'ing during a half-hour "window" time. Whether the logging is reported in EST, CST, or Zulu is unimportant; what is important is knowing the exact time so as to be able to convert it to the DX'ers local time. Converting DX times logged around midnight can be a real joke. And there's the problem; recently, Musers have used both ELT and local time, Zulu time and military time, and even 24-hour time with standard ":", causing confusion. I have no intention of attempting to convert your time to a standard when you don't state in which time you have reported your DX. And so, unless someone can convince me to change my mind, I request that, henceforth, domestic DX'ers use their local time and state what it is at the head of the Muse. Foreign DX'ers, use your local time also, but add or substitute UTC to clarify, if you wish. Therefore, the responsibility for converting times falls on the person who will be using the information: the DX'er. Now, let's get on with the DX'ing! 73.

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